DOCUMENT RESUME

ED 154 175 CE 015 884

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TITLE Current Issues in the Relationship between Manpower Research and Policy. A Special Report of the National Commission for Manpower Policy. Special Report No. 7.
INSTITUTION National Commission for Manpower Policy, Washington D.C.
PUB DATE Mar 76
NOTE 93p.

EDRS PRICE MF-$0.83 HC-$4.67 Plus Postage.
DESCRIPTORS Conference Reports; Job Market; Labor Market; *Manpower Development; *Manpower Needs; Manpower Utilization; National Surveys; *Policy Formation; Public Policy; *Research; Research Needs
IDENTIFIERS *National Longitudinal Surveys; NLS; United States

ABSTRACT

This report summarizes the proceedings of a conference on manpower research that assembled a heterogeneous group of data gatherers, analysts, and policymakers to assess data and information needs, the usage of information by researchers, the policy implications of ongoing research, and the processes by which academic findings impact on policy. The content consists of a summary of the conference discussion which included manpower research and policy, research-policy interface, macroeconomic theory and policy, local manpower planning, designing and administering research efforts, manpower research priorities, research in congressional and administrative policy, and summary observations. The appendix, which comprises three-fourths of this report, contains a list of conference participants and four conference papers. These papers and their authors are as follows: (1) "The National Longitudinal Surveys: Lessons for Human Resource Policy," by Herbert S. Parnes; (2) "Lessons from the National Longitudinal Surveys: A Commentary," by Arvil V. Adams; (3) "Selected Comments on Research and Policy," by William Spring; and (4) "AFL-CIO Statement on Manpower Research and Policy," by Markley Roberts. (EM)

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Resource Development

Current Issues in the Relationship Between Manpower Research and Policy

ED154175

A Special Report
of the
National Commission
for Manpower Policy

Special Report No. 7

March 1976

U.S. DEPARTMENT OF HEALTH
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
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This special report contains a summary of the proceedings of a conference concerned with current issues relating to manpower research and policy, and presents certain papers prepared in conjunction with that conference. Although the conference was sponsored jointly by the National Commission for Manpower Policy and the National Council for Employment Policy, the opinions expressed herein represent the personal views of the individual authors and conference discussants. These views should not be considered as official viewpoints of the Commission or any other agency of the United States Government.

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FOREWORD

The National Commission for Manpower Policy was alerted early in its deliberations to the inadequate data base for policy formulation, program development and evaluation and discussed this problem in its First Interim Report to the Congress.[1/] As the Commission continued to formulate its recommendations with respect to both immediate and long range manpower policy, the weakness of the knowledge/data base came to its attention repeatedly. Accordingly, the Commission followed its customary practice of eliciting the assistance of specialists and generalists from beyond its own membership and staff. This report summarizes the results of an early effort to sharpen the interface between manpower research and manpower policy.

As a first step, the Commission requested Professor Herbert Parnes of Ohio State University who has been the Director of the National Longitudinal Surveys since their inception in the mid-1960s to review the substantial and rapidly growing body of findings that have emerged from this ongoing work. These national surveys represent the single most ambitious research effort to deepen our knowledge of the experience of different groups in the labor market. Specifically, we asked him to focus on those findings that in his opinion had implications for manpower policy. Professor Parnes, in the face of heavy commitments, graciously made time to respond to this request. His paper, is reproduced in Appendix B in its entirety.

Next, the Commission sought the assistance of the National Manpower Policy Task Force, recently renamed the National Council for Employment Policy, the membership of which is comprised of individuals with a continuing concern with both manpower research and manpower policy. Drs. Charles Killingsworth and Sar Levitan, the present Chairman and immediate past Chairman of the Council, together with Robert Taggart III, the Council's Executive Director, agreed to assist the Commission in arranging a conference that would consist in the first instance of Council members, supplemented by others with an interest in the theme. A list of those who attended the February 26-27, 1976 conference is appended. The Commission is deeply grateful to the Council for this assistance and particularly Dr. Taggart who assumed the task of preparing the summary which conveys so well the quality of the discussion.

1/ See An Interim Report to the Congress of the National Commission for Manpower Policy: The Challenge of Rising Unemployment, February, 1975, p. 16.

During the fifth meeting of the National Commission for Manpower Policy, held on March 24th and 25th, several critical areas where there is a need to improve the linkage between manpower research and policy were reviewed. Of particular interest to the Commission was the need for new approaches to improve local labor market information. Interest was also expressed on intensifying research efforts directed at exploring the complex issues associated with the concept of "full employment," the number of persons "able and willing to work" and the different meanings that attach to the measurement of unemployment. In the near future, the Commission will address several areas of its concern with respect to improving the information knowledge base for manpower policy decisionmaking.

ELI GINZBERG
Chairman

I. SUMMARY OF CONFERENCE DISCUSSION

A. Manpower Research and Policy: The Critical Issues

Research, evaluation and experimentation have played a significant role in manpower policy, as much or more than in any area of government social policymaking. Addressed to labor market problems with quantifiable dimensions, based on human capital investment notions with a quantitive focus, and aimed at demonstrably raising employment and earnings, manpower programs were used and generated copious statistics, set out to test and demonstrate alternative approaches, and demanded comparatively rigorous proof of performance.

As long as tight labor markets prevailed, and employment and training efforts were expanding, there was harmony between manpower research and policy. By the late 1960's, however, discords began to appear. First, as the programmatic tool kit was filled out, research and experimentation generated fewer operational programs. R&D was no longer at the cutting edge of public policy. Second, new theories challenged the human capital investment idea underlying manpower efforts as well as the macroeconomic foundations of full-employment policy. Third, in a changed political climate, the burden of proof was shifted from those doubting success to those asserting it. Evaluations which had suggested the positive impact of training programs were themselves reevaluated, and doubts about their rigor led to doubts about the worth of the programs. Statistical measures of performance were challenged by those seeking a more longitudinal perspective, while labor force data were questioned by those who saw problems as both more and less serious than reflected in the official numbers.

Recent developments further complicated the role of research, evaluation and experimentation. The focus of decisionmaking shifted to the local level under the Comprehensive Employment and Training Act of 1973 (CETA). Where national categorical programs had provided large samples for comparing alternative approaches to serving different clienteles, the diversity under CETA made undermined performance comparisons and evaluations. Operational considerations, the prime concern of local decisionmakers, pushed out research demands. The massive recession changed the ballgame, undermining many of the assumptions which were implicit in earlier studies. Many old lessons no longer pertained, while new issues related to public employment--such as the productivity of hired workers, the public service needs to be

met and the degree of substitution of federal for local funds--proved difficult to research. The burgeoning of unemployment compensation rolls was unanticipated and the reporting system was inadequate.

The role of research, evaluation and experimentation in the first decade of manpower policy was assessed by the National Academy of Sciences in its study, Knowledge and Policy in Manpower. Yet this was hardly the final word on the subject, and debate continues about past findings and relationships between research and policy. Even more critical are the questions about the present and future. What is the role of research in addressing new issues? Where should emphasis be placed? How can knowledge be translated more directly into policy?

On February 26 and 27, 1976, the National Commission for Manpower Policy and the National Council on Employment Policy jointly sponsored a Conference on Manpower Research and Policy to begin preliminary discussions of these topics. The aim was to draw together a heterogeneous group of data gatherers, analysts, and policymakers to assess (1) data and information needs including the potential of longitudinal surveys; (2) the usage of existing and evolving information by researchers; (3) the policy implications of ongoing research; and (4) the processes by which academic findings impact on policy.

The conference consisted of three substantive sessions. The first focused on a paper and presentation by Herbert Parnes, Chairman of Ohio State University's Faculty of Labor and Human Resources, detailing important findings from the National Longitudinal Surveys (NLS). These surveys, representing a major component of the manpower research effort in the last decade, have significant policy implications, and, as one of the major sources of longitudinal information, they suggest what can be learned from the longitudinal approach. Dr. Parnes' observations were followed by prepared comments from a generalist concerned with broader policy questions, A. H. Raskin of the New York Times, a spokesman for the segmented labor market theorist whose views differ somewhat from those implicit in the NLS, Michael Piore of the Massachusetts Institute of Technology, and another researcher specifically involved in applying the longitudinal data to policy issues, Arvil V. Adams of the University of Utah. Their comments were followed by a general discussion.

The second session was concerned with knowledge gaps in three specific areas. (1) macroeconomic theory, (2) local manpower planning, and (3) federal operation of a research effort. The broader economic theories which underlie manpower programs were assessed by Lloyd Ulman of the University of California - Berkeley. Mark Roberts of the AFL-CIO provided extensive comments. Data needs and uses at the local level under CETA were discussed by Charles Myers of MIT and William Mirengoff of the National Academy of Sciences, based on their respective evaluations of the program. The problems of selecting a research agenda, administering research programs and utilizing the results, were outlined by William Hewitt of the Employment and Training Administration, with comments by Sar Levitan from the George Washington University's Center for Social Policy Studies.

The third session was more broadly focused. Garth Mangum, of the University of Utah, assessed our current knowledge in human resource areas relative to policy needs, suggesting a set of research priorities. William Spring of Boston University reviewed the last fifteen years of manpower legislation to determine the relationship between research and lawmaking. After a general discussion, there were closing observations by Charles Killingsworth and Eli Ginzberg, the respective chairmen of the National Council on Employment Policy and the National Commission for Manpower Policy.

B. The Research-Policy Interface: A Selected Emphasis

The research-policy interface was highlighted in Dr. Parnes' opening presentation which described the National Longitudinal Surveys and discussed the findings concerning labor mobility, labor market structure, the payoffs of education and training, the importance of labor market information, the effects of health, the role of motivation and other personal attributes, as well as race and sex discrimination. The policy implications of these findings were then assessed.

The NLS traces the labor market experience of four cohorts: men age 45-59; women between the ages of 30 and 44; and young men and women age 14 to 24. Beginning in 1966, the surveys will continue through 1978. They differ from other data sources in their more comprehensive coverage of these particular groups, the inclusion of a number of psychological and sociological as well as economic variables, and, most of all, in their longitudinal design. Granted that the surveys

are not yet completed, that they do not cover the entire labor force, and that only the most preliminary analysis has been completed, the data offer some important lessons for social policy:

First, and perhaps of greatest importance, most individuals, even in the NLS cohorts selected because of their special labor market problems, have reasonably satisfactory labor market experiences. For the overwhelming majority, jobs are a source of satisfaction and opportunity. There is a considerable degree of job mobility and voluntary job changes usually lead to higher wages and greater satisfaction. There is little evidence of segmentation, and though disadvantaged groups such as blacks suffer from discrimination and are less likely to advance than whites, they are not generally trapped in dead-end jobs.

Second, labor market processes are more positive and more nearly in accord with competitive models when there is a tight labor market, i.e. workers tend to advance more rapidly, race and sex differentials tend to diminish, and human resource investments have a greater payoff.

Third, while the amount of formal education is a major determinant of labor market success, the kind apparently is not. Corrected for differences in students, graduates of vocational curricula apparently do no better subsequently than graduates of general curricular.

Fourth, vocational training outside of regular schools leads to improved labor market success. Blacks benefit more than whites, but are less frequently able to get into training programs.

Fifth, health is an important factor in labor market success, with evidence that it is both a cause and an effect. Those who are less healthy are more likely to drop out of the labor market in the future as well as to have lower earnings.

Sixth, all else being equal, students who know more about the job market do better subsequently.

Seventh, the individual's belief in himself or herself affects the future. Self concepts can also be conditioned by success. Other attributes such as job satisfaction, and family values affect the likelihood of early retirement and of work by married women.

Eighth, race and sex discrimination are evident in longitudinal as well as cross-sectional data. Even with the extensive controls possible in the NLS, most of the difference in earnings and occupational status is unexplained, leaving a large residual presumably related to discrimination.

Building on the NLS findings, but adding several views of his own, Dr. Parnes concluded that:

Full employment is a sine qua non for effective human resources policy and public employment programs and wage and price controls are needed to the extent there is a trade-off between lower unemployment and inflation. He urged improvements in counseling and other means of improving job placements.

Labor market information is a measure to combat labor market disadvantages and to strengthen labor market operations. He asserted that training outside the regular school system is an important instrument for improving future success, and especially for correcting racial and sex differentials, which are substantial and need attention. Finally, he observed that the problems related to early retirement need to be examined in greater detail.

The commentators on the Parnes paper agreed with some of the policy conclusions and disagreed with others. They also varied in their assessments of the NLS. On the positive side, the surveys were recognized as a rich cross-sectional data source, one of the few combining attitudinal variables and intelligence measures with behavioral variables. It was noted that most analysis of the data has been cross-sectional rather than longitudinal. Yet some casual relationships have been better understood through the longitudinal approach. Health, initiative and job satisfaction have been validated as predictors of later behavior, confirming expectations in most cases but also allowing at least a first order of chickens and eggs. The data have also helped illuminate research questions where recall error is a problem, such as in mobility, migration and life cycle patterns. Again, the findings tend to confirm what can be inferred from cross-sectional data, but they offer the opportunity to test notions such as the segmented labor market theory.

The commentators also noted a number of drawbacks in the NLS. First, there were obvious problems in moving from data to policy. Parnes' conclusions were felt to be largely independent of the surveys, and could have been supported completely by cross-sectional data. Cause and effect interpretations were questioned. For instance, it was noted

that the socioeconomic status index was a predictor of successful labor market adaptation, but it was not clear whether this reflected differing pre-school investments by the family, the effect of role modeling, variations in labor market information, the effect of income differentials, class variables, or other factors. Each causal pattern would suggest a different policy intervention. Similarly, the conclusion that poor health causes labor market problems is based on the correlation between these variables. Other evidence, however, suggests that self assessments of health status vary significantly with economic conditions; by the same token, there is no assurance that health can be improved or its consequences mitigated at a reasonable cost. It is always difficult to interpret the directions of causality and to decide when a relationship or correlation supports a policy intervention.

The underlying assumptions of the NLS were also questioned. The commentators felt that the surveys were too "supply oriented," concentrating on the process by which individuals were prepared for entry into the labor market, based on the investment in human capital notion. The weakest variables were those related to institutions such as the educational establishment and to the composition of jobs. The content of the "black boxes" could sometimes be surmised from the responses of those surveyed, but in some cases the wrong conclusions could be reached.

A third issue was the generality of the NLS data. While much was included, the net may still have been too broad - gauged to catch policy relevant factors. For instance, coverage or non-coverage of pension plans was found to affect retirement decisions and mobility, but there was no information on vesting, portability, years of coverage, or level of benefits, all crucial variables necessary to weigh policy interventions. Likewise, health effects were found to have an impact on labor market success, but it is necessary to know more about disabling conditions, functional limitations, eligibility for income maintenance and other factors before deciding how to intervene, whether vocational rehabilitation is appropriate or income maintenance the desired alternative.

Several issues surfaced in the discussion following the prepared comments. One was whether the NLS was biased by its initial concepts or rather whether secondary labor market theorists had failed to use it effectively. While several discussants requested collection of more data on job vacancies and other work characteristics, some concluded that such data were very difficult to gather and almost impossible to match up systematically with the type of information gathered in the NLS. Dr. Parnes stated that in a measurable outcome, such as

black/white differentials, or as changes in individual attitudes as a result of labor market experiences reasonable guesses could be made about what was occurring in the "black box," i.e. supporting conclusions about discrimination and the existence of structural impediments in the labor market. Others argued that the residual approach in measuring discrimination was ineffective and that inferences could not be made about labor market structure without variables related to this structure.

Another set of questions focused on the use of longitudinal studies in a changing world. Once committed to a set of variables, how can you adapt the focus in light of the theoretical developments? How can cyclical changes be differentiated from secular changes and from individual changes? For instance, will the new cohort of teenagers experience the same adaptation and patterns as the past one? The longer the longitudinal study, the more changes in institutions and environment, therefore, the less applicable the results. There were some doubts whether policy decisions could have the long-run focus needed for prospective rather than retrospective studies.

In general, however, the value of the NLS as a background for other longitudinal studies and as a supplementation to available cross-sectional materials was unquestioned. As with all basic research, it can be applied to a number of issues, and must be processed and amended before such applications. The lack of immediately relevant policy implications in no way suggests that it is unimportant or unjustified. The returns are not all in, but enough valuable information has been generated already to justify the investment.

C. Macroeconomic Theory and Policy

One of the major findings from the NLS, and a conclusion emphasized by Dr. Parnes, was the critical importance of a tight labor market. Most participants shared the belief that the 1975 unemployment record was deplorable, deleterious and unnecessary. Many questioned the false rejoicing over a recent drop in unemployment to slightly below 8 percent. Yet this consensus is not shared by theoreticians or policymakers, and certainly not by the current administration. Dr. Ulman sought to trace theoretical developments from the Keynesian foundations through the 1970s, suggesting how they had come to support a do-nothing stance in the face of the worse recession since the Great Depression. He then suggested some alternatives for an active manpower policy based on the Swedish model.

In Keynesian theory, unemployment insurance was recognized as a useful automatic stabilizer to prop up aggregate demand, and public works were accepted for the same end. Keynes recognized the noncompetitive structural features in the labor market, and the fact that labor was not homogeneous. NeoKeynesian theory postulated a sloping rather than abruptly rising aggregated supply curve, and suggested that manpower policies could help by eliminating bottlenecks.

The challenges in the late 1960s and the 1970s came from several corners. Macroeconomic "expectation theories" suggested a worsening tradeoff between unemployment and inflation as a result of powerful market groups trying to leap-frog inflation, and the whole Philips curve notion was upset by the concurrence of high rates of inflation and unemployment. Other analyses of labor force changes suggested a permanent shift in the tradeoff between inflation and unemployment because of the increased labor market share of women and youth. The secondary labor market theories questioned whether structural impediments could be overcome on the supply side.

The Swedish approach is notably different from that of the U.S. It is based on a broad consensus that anything more than frictional unemployment is intolerable and that policies must begin by assuring high levels of employment. It then tries to see what can be done to reduce inflationary pressures. It uses value-added rather than corporate income taxes because of the belief that the latter subsidizes inefficiency. It tries to selectively stimulate demand to aid generally healthy but cyclically lagging sectors, while removing people from those in permanent decline. It maintains central authority to assure needed flexibility, and relies on the intimate cooperation of unions and management.

Mark Roberts asserted that knowledge is presently available to reduce unemployment, but leaders lack the resolution. Job banks, labor mobility aids, targetted public works and public employment programs would all help to improve the employment outlook and reduce inflationary pressures but they are not emphasized. Instead, policy focuses on women and teenagers in the labor force who are claimed to have a high unemployment propensity, on unemployment compensation recipients who are said to be reluctant to seek jobs, and on welfare "cheaters" who spurn work. Given this view, proposed solutions tend to strike at the social welfare system, for instance, or lower unemployment benefits. These issues, in Roberts' opinion, are bogus, detracting attention from

massive job deficits and the dismal record of economic policymakers. Researchers are pandering when they ignore the broader problems and continue to focus on the small issues. As examples, the real needs of the unemployed have not been analyzed. There has been little progress on a subemployment index. The input-output approach to demand management has not been explored and neither have the employment impacts of foreign trade. From labor perspectives', present policies are not consistent theories but rather a combination of isolated arguments to justify doing nothing in a Hooverian belief that the problem rests with the unemployed or with labor generally rather than with the economic system and macroeconomic policies. Dr. Roberts urged researchers to provide the information needed to make full-employment a reality.

D. Local Manpower Planning

Preliminary analysis of local manpower planning delivery suggests a gap between research models and Department of Labor, guides and the actual program experience in Eastern Massachusetts. Employing the criteria for a model manpower planning system developed in Manpower Planning and Local Labor Markets by Garth Mangum and David Snedeker, Dr. Myers assessed the effectiveness of program sponsors in a number of Massachusetts localities.

The first step in the model is the determination of the needs of clients and the status of the local labor market. In the sample sites in Eastern Massachusetts, the unemployment rate was so high, the future so uncertain, and the universe of need so large relative to the funds available that rationing by objective criteria was extremely difficult. In this situation of a very exaggerated over-demand for CETA programs, operation consisted mainly of screening applicants to fill the available slots. The program emphasis centered in the areas of work experience under Title I and PSE under Title II and VI.

The second step in the model is to establish broad goals and set specific objectives based on the community's assessment of its needs. The needs of the communities are to be transmitted through the manpower planning councils. Often, however, the planning councils simply approved the plans of the prime sponsor staffs since they were not provided with adequate information to make a detailed assessment of the plans submitted. Unfortunately, attendance at the council meetings was usually only 50 percent of membership, concentrated among those who were involved in agencies which directly delivered the services. This situation is showing some signs of improvement as the mechanisms for local planning and administration of CETA gain momentum and experience.

The third and fourth steps in the model are to identify barriers to employment and find alternative treatment strategies and subsequently decide on service deliverers. When pre-CETA program operators seek to maintain their organizations and to continue uninterrupted services to their client groups, the choice of delivery agents often precedes the discussion of "alternative treatments." The organizations that operated programs prior to CETA argue, often correctly, that their experience in the provision of social and employment-related services should be taken into account in the planning process. The vested interest of the pre-CETA organizations combined with the severely depressed economic situation has acted effectively to stifle innovative techniques for institutional and on-the-job training programs. The primary influence on the manpower program success has been and remains the condition of the labor market.

The final steps are to monitor performance and modify programs accordingly. The principal monitoring done in the early stages of CETA was to simply compare actual performance with the goals outlined in the plans submitted to the regional Department of Labor. In addition, accounting and audit procedures and guards against abuse of hiring guidelines under the PSE programs occupied the remaining time devoted to monitoring activities. Performance measures are still in the formative stage, saved for the Balance of State Prime Sponsor where the Management Information System has begun operation. This system will allow for sophisticated and timely evaluation and monitoring.

The primary behavioral adjustments of prime sponsors have centered on responses to the economic situation. This is reflected in an increased emphasis on classroom training and work experience programs, rather than the OJT emphasis of the first year plans.

The economic situation in Massachusttts deviates very far from an ideal planning environment where an expanding economy is really the key to success. Nevertheless, some prime sponsors are making concerted efforts, particularly within the State Manpower Services Council, to generate detailed labor market information to allow for a more comprehensive and direct emphasis on labor market information in the prime sponsor plans. Other prime sponsors in Massachusetts, however, are struggling to provide manpower services and have little interest in, or ability to utilize, sophisticated information about labor market conditions.

The national sample reviewed by William Mirengoff includes many program sponsors facing less severe conditions and therefore having more time and resources for the niceties of manpower planning. Almost all expressed dissatisfaction with existing data, claiming it was too general for most uses and that it frequently was not available for program sponsor areas. This suggests that better data might improve planning. To date, however, their CETA plans have been little more than exercises to turn on funding spigots, and their major interest in data is to justify a larger allocation. The absence of planning might be due to inexperience, the difficulties of getting CETA off the ground, or the frequent changes in federal guidelines, but there is evidence in only a few exceptional cases of a willingness or ability to advance the level of planning.

E. Designing and Administering Research Efforts

William Hewitt reflected on the problems of developing and implementing a research agenda and influencing policy with the results. His talk highlighted many of the issues raised in the National Academy of Sciences' review, Knowledge and Policy in Manpower. Mr. Hewitt characterized the research of the ETA as a potpourri, balancing long-term goals with immediate needs, basic with applied research, demonstrations with theoretical investigations. Resources were limited, issues changed rapidly, and there was no comprehensive plan despite attempts to develop one through the National Manpower Policy Task Force and other groups. Recent efforts with the Department of Labor to formulate comprehensive reserach strategies relative to CETA, the Employment Service and apprenticeship have encountered similar problems. A taxonomy of research questions suggests so many possible topics and unknowns that it is difficult to winnow these down by any objective criteria.

There are also problems in choosing research performers, monitoring their work, and utilizing the results. Competitive procedures which have been used with increasing frequency may in some cases reduce the cost, but they tend to reduce innovation and affect the quality of work relative to sole source contracting. It is difficult to keep on top of a varied research agenda and the staff within the ETA for this purpose has been drastically slashed. Utilization is expensive, and many research seeds are cast to the wind rather than cultivated. The past, present and potential payoffs of the research investment remain unclear.

In commenting on the dilemmas of operating a research program, Sar Levitan stressed the importance of the overall research climate created by prevailing political values and economic realities. Since most research is funded by the government, it too often tends to follow the party line. Moreover, objective research tends to provide a range of answers from which policymakers select findings supportive of their positions, molding consensus from freqently contradictory evidence. The declared failure of manpower programs, for instance, was not based on proof of poor performance, but rather on criticisms on the proof of success, coupled with some dubious interpretations and less than objective studies. The weight of evidence clearly suggests that manpower programs have not failed, yet this has become conventional wisdom.

Dr. Levitan scored researchers for their misplaced emphasis on numerology and model building, and the downgrading of institutionally-oriented research. Academic rewards go to the technically competent and not to those willing to take risks in translating knowledge into policy. Most of the rewards for the latter come from governmental research grants and the scribes tend to write what will please the prince.

Finally, Dr. Levitan warned that the decentralization of manpower efforts, combined with the retrenchment in staff of the Employment and Training Administration, threatens the future of manpower research. He went on to note that research is clearly a federal function, and the needs for research have not abated.

F. Manpower Research Priorities

Reassessing the past fifteen years of manpower policy, Garth Mangum concluded that its major shortcomings were a disregard of the long-term demographic, social and economic trends underlying immediate problems, and a failure to give adequate consideration to realities of the labor market. On the demand side of the market, three priority questions remain unanswered. First, how is the demand for labor generated from the demand for a final product? What determines the specific tasks, the wage levels, and the opportunity structure? What factors will change these characteristics? Second, how do they recruit and train them? What variables affect these staffing decisions? Third, what methods of acquiring skills are most appropriate for leaning specific tasks? How do these coincide with established patterns of skill acquisition?

On the labor supply side, where the primary concern must continue to be with the minority who do not realize reasonable success without help, Dr. Mangum identified several researchable issues: Controlling for institutional factors, what personal characteristics differentiate between the successful and unsuccessful and can these be altered? Can the barriers to labor market success be assessed and rated for each individual, and a meaningful treatment strategy designed? What are the lifetime needs for manpower services to assure not only temporary improvement but permanent change? What are the determinants of job and career choice and how can information be packaged to improve decisionmaking? How do we actually go about job searches and what aids would improve these methods?

Several other priority questions related to the match-up of supply and demand in the labor market were noted. First, segmented or secondary labor market theories are a useful concept, but there is no evidence of a sharp dividing line between primary and secondary jobs. Yet the characteristics of some labor market settings may have an effect on marginal workers and many indeed trap them. What constitutes the best job for a particular individual? Who is served by low paid, transitory work? Are secondary jobs expanding or contracting? Second, can a local area, region or nation improve its economy by improving its labor supply? What are the linkages between economic growth and development and manpower development? Third, how well does the labor market adjust to shocks such as the gas price increase or the building of the Alaska pipeline? Can adjustive mechanisms be improved? Finally, through controlled experiments it might be possible to ascertain the impacts of dual minimum wages, whether instruction in job search techniques or better preparation of parents for the vocational education of their children might not improve future success, or whether better linkages might be forged between unemployment insurance and training.

While this list is only suggestive, it illustrates that there are many challenges ahead for manpower researchers and many new, as well as old, worlds to conquer.

G. Research In Congressional and Administrative Policy

The influence of research, evaluation and experimentation has been frequently overrated, according to William Spring. While some claim that poverty programs were the inventions of social tinkerers and while research findings are frequently highlighted in policy debates, the evidence suggests that research is a lag rather than a lead variable. Congressional

decisionmakers, largely trained as lawyers, use the findings chiefly to fill out their cases for predetermined political positions.

In the early 1960s, almost everyone agreed with the thrust of manpower programs, the idea of the profitability of investing in human capital. This was not based on research but on the belief that something could be done to help the technologically displaced. MDTA and ARA were passed on faith rather than careful tests of the underlying ideas. The increased emphasis on the disadvantaged resulted not so much from ideology, but from a tightening labor market which left behind only the hardest to employ. In the expansionary days of manpower, the only thing needed to get a new program off the ground was documentation of need and generation of a model. Thus, in 1967 the subemployment index was used to support antipoverty manpower programs with no prior assurance that they would work.

In the 1970s, decentralization was urged by many based on alleged documentation of the shortcomings of current efforts. Essentially, however, the argument was that if one approach was not completely successful, then another would work. Decisions were not based on proof of the effectiveness of a localized, decategorized manpower system. Likewise, the debate over public employment echoed arguments which had been around since the Great Depression. Public employment was adopted not because of proof of success, but because the unemployment rate demanded action. Subsequently the idea was deemphasized not because of proven failure, but because of the same gut reactions which had led to the demise of such efforts after the New Deal.

According to Mr. Spring, we are now at a crossroads in research. With job search, secondary labor market, and expectation theories in vogue, there is no consensus on the value of manpower programs. Budgets have expanded so dramatically that manpower programs are ready targets to budget cutters. If research is to continue to play a role, researchers will have to take a much more active stance in espousing and supporting policies. Linkages will have to be forged between macroeconomic and microeconomic theory, and the implications of government action more clearly articulated. Income redistribution issues will have to be faced openly, rather than shoved under the carpet. No longer will it be enough simply to chip away at operational issues and leave the policymaking completely to others.

H. Summary Observations

Research and experimentation had a great influence on manpower policy in its formative decade. It contributed much to the understanding of the microeconomies of labor market operations and the multifaceted problems of the disadvantaged. New ideas were generated and implemented, later evolving into national programs. Rigorous methodologies were developed and applied to test performance of employment and training efforts.

Looking forward rather than backward, however, the view is much less sanguine. Many of the discussions during the conference raised questions about the present and likely future impact of research. In part, this manifested a changing climate. When venturing into the unknown, discoveries come easier and are much more notable than when the territory is settled. For instance, much in the NLS merely documented what was already surmised from a wide range of cross-sectional data, so that the independent impact on knowledge was not overwhelming in most regards. By the same token, demonstration projects have become less meaningful now that the manpower tool kit has been filled out. Research is better at identifying new options than in suggesting the proper choice among alternatives. The linkage between knowledge and policy is greatest in a centralized organizational structure, and the decentralization of authority has created problems. Also, the dramatic deterioration of economic conditions in the mid-1970s may have undermined the value of many earlier findings and made further research a low priority in light of the obvious job shortfall.

The research community is also to blame for its declining policy influence. In his summary comments, Dr. Killingsworth noted the dearth of original ideas and the basic negativism of current research. The human resource investment notion underlying training programs has been challenged by secondary labor market theories, while the macroeconomic foundations for an active labor market policy have been rebutted by claims that higher unemployment is unavoidable because of labor force changes. There is now no widely accepted theoretical base for research efforts, while the newer theories yield meager suggestions for action. Dr. Killingsworth blamed the research community for favoring sterile methodology over more sensible and realistic approaches. As an example, the displacement argument used to discount the value of public employment efforts, i.e., that jobs created by federal funds would be offset by reduced state and local jobs, was based on abstract theoretical formulations in which assumptions completely governed the outcome; there was no effort to use employment data and program totals to retrospectively examine the past effects of public employment programs. Finally, it was questioned whether

researchers were willing to take risks and to counter the party line, or had rather been co-opted. Dr. Killingsworth pondered why so little attention had been given to the notion of a guaranteed job rather than simply dismissing the idea as politically unrealistic.

Dr. Ginzberg raised serious questions about the availability of information for those trying to answer crucial policy issues. He cited the complete inadequacy of the data used to distribute CETA funds, and the dearth of information on unemployment compensation recipients and their needs and the widely varying guesstimates of the number of illegal immigrants working in this country.

Even where "good" data exist, such as those generated by the National Longitudinal Surveys, there is difficulty in bridging the gap between knowledge and policy. Dr. Ginzberg concluded that the surveys had considerably increased knowledge, but were not able to tie down some very critical institutional linkages such as what was occuring in the schools and in the workplace. He saw little relationship between the longitudinal data base and the conclusions drawn in the Parnes paper. On the other hand, this was the inevitable result of asking the mapmaker to serve as the helmsman. There was complete agreement among participants that the NLS was worthwhile and that the longitudinal surveys for the younger cohorts of men and women should be extended if feasible.

Reviewing the discussion of macroeconomic policies, Dr. Ginzberg agreed with the assessment that the wrong theories had prevailed in dealing with the present recession, but cautioned against applying the Swedish models which require a national consensus on fighting joblessness as well as more manageable and less heterogeneous problems. While macroeconomic theories cannot be dismissed, the current state of the art in forecasting and model building hardly provides the basis for reasoned decisionmaking. Academicians are also guilty of tunnel vision, losing sight of the human elements underlying unemployment and sweeping under the rug vast areas of uncertainty about key variables, such as the dynamics of labor force participation.

At the local level, data and research are really secondary to operational questions. Dr. Ginzberg concluded that some evaluation capacity could be built up over time, but that we should expect to try to generate more sophisticated information systems than could be usefully applied. The first priority is to get the most fundamental data for local decisionmakers at the least cost.

The role of research in manpower policymaking at the federal level has been influenced by the political environment. Research has been a second order priority, and findings are usually of interest only when they can be used to justify predetermined positions. It is a credit to the Employment and Training Administration that it has carried out such a wide ranging and balanced portfolio of research even though essentially "flying blind." Future priorities are as problematic as those in the past, with the ones suggested by Dr. Mangum reflecting a short-run, operational and subaggregate perspective. The climate is not very conducive to research or to employment and training efforts. A theory is needed to counter the undocumented and probably fasle "conservative" theories which have been increasing. Manpower efforts have become so large that they are necessarily in the firing line in a society which apparently opposes income redistribution or substantial equalization of conditions. As Dr. Ginzberg put it, "In a world of uncertainty, public action must be based on hope, faith and decency more than facts and findings. Our nation seems to lack many of these virtues at the present, and all of the research in the world will not make a difference unless they can be renewed and restored."

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APPENDIX A
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APPENDIX B

THE NATIONAL LONGITUDINAL SURVEY: LESSONS FOR HUMAN RESOURCE POLICY

BY

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The National Longitudinal Surveys: Lessons for Human Resource Policy

by

Herbert S. Parnes

This paper was prepared for the National Commission for Manpower Policy

The National Longitudinal Surveys: Lessons for Human Resource Policy

by

Herbert S. Parnes*

The National Longitudinal Surveys (NLS) of the labor market experience of middle-aged men, mature women, and youth were initiated by the U.S. Department of Labor in 1966. A decade later--two years before the final survey was scheduled to be conducted--16 volumes of findings had been written by the staff of the Center for Human Resource Research at The Ohio State University and published as Manpower Research Monographs by the Labor Department. In addition, well over 100 papers based on the data had been written by researchers at The Ohio State University and elsewhere. It is the objective of this paper to synthesize the portions of that literature that provide lessons for human resource policy.

The NLS involves representative samples of four segments of the United States civilian population: men, who when first interviewed in 1966 were between the ages of 45 and 59; women between the ages of 30 and 44; young men 14 to 24 years of age; and young women in the same age category. In each sample blacks are overrepresented in a ratio of almost four to one in order to provide sufficient numbers of sample cases for statistically reliable estimates. Each sample consists of approximately 5,000 individuals--about 3,500 whites and about 1,500 blacks. Each will

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*I am grateful to Malcolm C. Rich for his assistance in surveying a portion of the NLS literature and for his comments on an earlier draft. I have also profited from the suggestions of Thomas Chirikos, S. C. Kelley, Andrew Kohen, Steven Sandell, David Shapiro, and Richard Shortlidge, Jr.

have been interviewed periodically over a ten-year period, commencing in 1966 for the two male cohorts, in 1967 for the older group of women, and in early 1968 for the young women.

The original NLS project proposal described the broad objective of the study in the following terms: ". . . to identify and to explore the interrelations among factors influencing the labor force behavior and experience of . . . categories of the population for whom employment problems have been . . . severe." In describing the relationship of the NLS to previous research the proposal went on to claim that the distinctive contributions of the NLS would result from the combination of three characteristics: the inclusion of psychological and sociological as well as economic variables, the use of national samples, and the longitudinal design. The first of these characteristics would permit the exploration of variations in labor market experience <u>within</u> conventional categories based on such readily measurable characteristics as age, race, and educational attainment. The second would permit findings to be generalized to a greater extent than those of previous studies utilizing attitudinal and motivational variables, which had generally been restricted to particular local labor market areas or particular occupational groups. The third would make it possible to address types of questions that could not be investigated through cross-sectional designs (e.g., developmental processes, direction of causation between correlated variables).

Research that has been completed on the basis of the National Longitudinal Surveys has provided numerous illustrations of these advantages of the data. On the other hand, it is well to acknowledge at the outset of

this review the limitations of the evidence on which it is based. At least two of these relate to the basic design of the surveys; others stem from the fact that their full potential has not yet been exploited. To begin with, it is clear that since the NLS samples do not cover the entire population, they permit no inferences to be drawn about those not covered, e.g., males between the ages of 35-44 and females 50 and over. Second, although the samples are large from some points of view, they are too small for certain types of studies that might have significant policy implications--e.g., the labor market problems of American Indians or of Spanish-speaking Americans, or the experience of individuals who have gone through particular government training programs.

The second category of constraints stems from the fact that the field work for the National Longitudinal Surveys is not yet completed; indeed, the studies thus far executed are based upon no more than half of the data that will ultimately be available. For example, for neither of the two older cohorts has any study yet exploited data beyond the first five years; the analysis of the data for the young men and young women is not even that far along. Moreover, with only very rare exceptions, each of the completed studies has been based upon the data for a single cohort; topics selected for study and research designs have not necessarily been uniform from one cohort to another. As a consequence, it is frequently not possible to make confident generalizations about the influence of a particular characteristic across all four cohorts.

Despite these limitations, the research thus far completed has produced a wide variety of findings, many of which have substantial implications for

human resource policy. In reviewing these results, I shall make no effort to be exhaustive with respect to either topics or authors. My purpose is rather to focus on those conclusions that yield fresh insights into the factors affecting the labor market experience and behavior of individuals and that have the most profound implications for human resource policy. The remainder of the paper is divided into three sections. The first summarizes the NLS evidence relating to the operation of labor markets. The second reviews findings on the important correlates of labor market success. The final section presents my interpretation of the lessons for social policy that are to be gleaned from the NLS evidence.

I THE OPERATION OF LABOR MARKETS

To provide a proper perspective, it is useful at the outset to recognize that even within the four NLS cohorts, which were selected because of their special labor market problems, most individuals have reasonably satisfactory labor market experiences. For example, among the middle-aged men, over four-fifths were still in the labor force at the time of the 1971 survey, when their ages ranged from 50 to 64; nine-tenths had experienced no unemployment over the preceding two years; about half of those employed reported that they "liked their jobs very much," and less than one-tenth registered any degree of dissatisfaction. Over the five years from 1966 through 1971, those who remained employed experienced, on average, an increase in real hourly and annual earnings. Irrespective of employment status, there was an increase in mean real per capita family income and in mean real assets. Little wonder that a substantial plurality

of the men believed that they had "progressed" during the five-year period and that fewer than one in ten believed they had "moved backward" (4:9-28).*

Among women in their thirties and forties the same generalization appears to be warranted for those who were labor force participants--slightly under half of the total group when the surveys began in 1967, and almost three-fifths five years later. There was considerable stability in employment status during the period. Almost four-fifths of the women who were employed in 1967 were employed also in 1972. Among labor force participants, fewer than 4 percent were unemployed at the time of the 1972 survey, and only one-ninth had experienced any unemployment in the preceding twelve months. Real average hourly earnings of wage and salary workers rose by about 10 percent over the five-year period for the entire cohort and at almost twice that rate for those women who were continuously employed. The proportions of women reporting high satisfaction with their jobs was even greater than that among the middle-aged men. Likewise, even larger proportions of the women than of the men reported that they had "progressed" over the five-year period (13:11-23).

Even though unemployment rates of youth are higher than for any other age group, a substantial majority of those not enrolled in school appear to enjoy reasonably stable employment. For example, over three-fourths of young women 18 to 24 years of age who were out of school and in the labor force when they were first surveyed in 1968 had suffered no unemployment

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*In all such parenthetical notations, the first number is keyed to the list of reports at the end of the paper; the numbers following the colon are page numbers.

in the preceding calendar year (14:117). Moreover, over three-fifths of the employed reported that they liked their jobs very much (33:13). Among young men between the ages of 16 and 26 who were out of school between 1966 and 1968, almost three-fourths experienced no unemployment over the two-year period (7:52). Although levels of job satisfaction were not as high as among young women, almost half reported in 1966 that they liked their jobs very much, and only one-tenth expressed some degree of dissatisfaction (5:140).

Labor Market Processes

Turning attention from the status of workers to labor market processes, there is evidence in the NLS data that, at least so far as central tendencies are concerned, labor markets operate as economic theory suggests. Specifically, there is a considerable degree of mobility, and the voluntary job movement that occurs appears to be functional in the sense that mobile workers are likely to shift into jobs in which, on average, they are both more productive and more highly satisfied. Consider, for example, the middle-aged men, among whom mobility might be expected to be low because of their age and their long tenure in current jobs. More than one in every eight members of the sample who were employed as wage and salary earners in 1966 had voluntarily moved to a different employer by 1971. The incidence of movement was clearly not random, being more likely among workers with shorter tenure, lower pay, and lesser degrees of job satisfaction. Moreover, as compared with immobile men, the movers were considerably more likely to register increased job satisfaction in their 1971 as compared with their 1966 jobs. In terms of average hourly earnings

the job-changers did at least as well as the nonchangers and, generally speaking, somewhat better (40:96-113). Changes of occupation are even more frequent than changes of employer among middle-aged men. Analysis of occupational moves made over the same five-year period indicates that perhaps as many as one-fourth had moved from one major occupation group to another, and that those who changed occupations tended on average to move up the occupational ladder and to experience increased job satisfaction (29:148).

Interfirm movement is considerably greater among women in their thirties and forties than among the middle-aged men, as might be expected on the basis of their younger age and their shorter average job tenure. However, both the propensity to change jobs and actual job movement among the women are influenced by substantially the same factors that operate in the case of the men, and there is evidence that job changers are more likely than nonchangers to improve their earnings (42:175-180). Although the mobility of the two cohorts of youth has not yet been analyzed as intensively as that of the older cohorts, it is reasonably clear that the same generalizations will be supported by the data. Mobility rates among youth, of course, are substantially higher than among older workers. As a rather dramatic example, it may be noted that over one-half of the young men who had been out of school during the two-year period 1966-1968 had made at least one voluntary or involuntary change of employer; more than one in seven had made at least three such shifts; three-fifths had made at least one change of occupation; and one-fifth had changed residence across county or SMSA lines. By and large, the job changers were more likely than the

nonchangers to improve their pay, their occupational status, and their level of job satisfaction (7:101-102).

Tests of the Dual Labor Market Theory

In addition to providing the kind of evidence on labor market operation reviewed above, NLS data have also been used to test the so-called dual labor market theory. Specifically, Andrisani has analyzed the occupational status of the first jobs and the 1968 jobs held by out-of-school male youth, as well as their average hourly earnings in 1968, to test three hypotheses implicit in the dual labor market theory: (1) that rather impermeable barriers between the primary and secondary labor markets prevent intersectoral mobility; (2) that investments in human capital will not allow, say, poor blacks to escape from the secondary market, and (3) that human capital investments make a difference in status within the primary market but not in the secondary market, in which all workers are alleged to "look alike" to employers.

Classifying jobs into "primary" and "secondary" on the basis of occupational and industrial earnings, Andrisani showed that the two categories differed according to employment stability, job security, industrial concentration, degree of unionization, and socioeconomic status--the factors most "dualists" emphasize as differentiating between the primary and secondary markets. Although Andrisani's findings are too rich to be described in detail, it is perhaps sufficient to note(1) that there was evidence of a substantial degree of secondary-to-primary-market mobility between first job and job held in 1968 (18:55-58); (2) that while blacks are less likely than whites to enter primary jobs or to move from the secondary to the primary market, they are by no means excluded from

primary jobs, nor is their entrance random with respect to human capital characteristics (18:66); and (3) that human capital variables do indeed bear a relationship to earnings in the secondary labor market, although less strongly than in the primary market, and hardly at all for blacks (18:76-80).

Acknowledging that his evidence is no more consistent with a perfectly competitive labor market than with a completely segmented market, Andrisani concludes that

> While all dualists have never really believed that the secondary sector is an economic prison from which there is no escape, neither have manpower policy-makers been unmindful of labor market discrimination or of other departures from perfect competition. Furthermore, dualists have never seriously argued that market forces are completely absent, nor have policy-makers strongly contended that they are perfectly functional. The former seem to have concentrated on the exceptions, while the latter have emphasized the tendencies (18:91).

Another hypothesis deriving from the dual labor market theory has been tested by Flanagan in the course of his examination of racial differentials in the hourly wage rates of middle-aged and young males. Flanagan is interested in ascertaining whether labor turnover leads to high wages among blacks or whether, as dual labor market theory would predict, "market returns to job changing are . . . low or nonexistent" (22:521). He finds that recent job changing among the older group of men is no higher for blacks than for whites, that it is associated with higher wage rates for both groups, and that the effect is considerably stronger for blacks than for whites. Admitting that his research is not a rigorous test of the dual labor market theory, he concludes that "any labor market segments

which may exist within an age group are not defined by differential turnover flows" (22:529).

Level of Economic Activity and Labor Market Operation

Several pieces of evidence from the NLS data show that many types of labor market processes--in addition to the evel of unemployment itself--are more benign and more nearly in accord with competitive economic theory when the level of demand for labor is high than when there is slack in the economy. For example, both the propensity of middle-aged men to change jobs and the rate of actual voluntary movement were greater during the period 1966-1969 than over the two-year period 1969-1971 when economic conditions deteriorated (40:89,99-103); moreover, the likelihood that voluntary job changes will result in a relative wage gain is greater in a buoyant than in a depressed economy (40:107). As another example derived from the same cohort, most of the widening differential between the white and the black labor force participation rate that was discernible over the five-year period 1967-1971 occurred between 1969 and 1971, suggesting that the loosening of the labor market in that period had a more serious effect on blacks than on whites (4:15). Finally, among white young men who left school with no more than 12 years of education prior to 1964, the likelihood of finding a first job in the primary market was significantly lower than for comparable youth whose schooling ended during the tighter labor market that prevailed between 1964 and 1966 (18:64).

II SIGNIFICANT FACTORS IN LABOR MARKET SUCCESS

I turn now to the NLS evidence on factors associated with variation among individuals in several dimensions of labor market success. As

previously indicated, I intend to be highly selective, focusing only on those findings that shed somewhat new light on the subject and that involve variables amenable to control through various kinds of intervention.

Education

It is well known that the amount of formal education an individual has is related to virtually every aspect of labor market experience, and NLS data confirm these relationships for all cohorts. Fewer confident generalizations can be made, however, about the effects of different kinds of education. A recent NLS study by Grasso has attempted to ascertain whether there are differences in early labor market experience among non-college-bound graduates of the several high school curricula. More specifically, Grasso analyzed the post-school experience of male youth with exactly 12 years of education to see whether he could detect net differences among graduates of different curricula in several "vocationally relevant" measures, including extent of occupational information, attitude toward adequacy of preparation for work, participation in post-school training, wages, and job satisfaction. A number of aspects of the research design--including the use of multivariate techniques, more appropriate control variables, and a more varied list of criterion variables (24:33-46)--create somewhat greater confidence in his findings than in those of previous studies of the same subject (44).

There was no evidence, at least as of 1969, that graduates of vocational curricula differed from those who completed the general curriculum in the extent of labor market information (24:65-66), in a desire for additional education or training (24:66), or in the extent of

post-school vocational training (24:66-70). Nor did the vocational graduates fare better in starting rates of pay, in wage improvement over the three-year period 1966-1969, or in job satisfaction. Indeed, in only one respect did the vocational graduates display a clear advantage over the general graduates (and this for whites only): they were more likely to convert post-school training into higher earnings (24:73-74).

Grasso acknowledges that his findings do not necessarily demonstrate that vocational education served no useful purpose during the period covered by the study; he observes, for example, that it may have served to reduce drop-out rates. Moreover, he also points out that certain vocational programs may create pronounced advantages even though the curriculum in the aggregate does not, and argues for more disaggregate evaluation (24:85-86).

Training

There is abundant evidence in the NLS data that individuals who have participated in formal training programs outside of regular school do better in a number of respects than ostensibly comparable individuals who have not. Controlling for amount of education and other human capital variables, training has been shown to be significantly related to the hourly wage rates of male youth (22:525), of women in their thirties and forties (26:110), and of middle-aged men (17:63). Again controlling for other relevant variables, training has also been found to contribute to the socioeconomic level of occupational assignment of young male high school graduates (24:145) and of women in their thirties and forties (41:76).

However, there is also evidence that findings of these kinds must be treated with some reservation, for it is not always clear that the training was the actual cause of the measured advantage. In an imaginative

exploitation of the longitudinal character of the NLS data, Adams has shown that the earnings advantage that prevailed in 1970 among a sample of white middle-aged men who had received training between 1966 and 1969 (as compared to men without training) was no greater than the earnings differential that had prevailed between the two groups in 1965--prior to the time the training had occurred. In both analyses, the same control variables were used. The interpretation is clear: what appears in the cross-section to be a "return" to training may in actuality be merely a manifestation that training is a selective process with respect to variables that have not been adequately controlled--e.g., motivation, intelligence, etc.

Finally, it is clear from the work that has been done with the NLS data that there may be substantial variation in the degree to which given types of training benefit individuals with different characteristics. For example, in the study already referred to Adams concluded that the training received by middle-aged white men over the period 1966 to 1969 produced no discernible improvement in their earnings relative to those of comparable men without training; but that such training <u>did</u> benefit middle-aged black men. Even in this case, however, the advantage existed only in the case of those blacks who had also participated in training programs prior to 1966 (17:64-73).

Flanagan has also shown racial differences in the impact of training among male youth as well as among the middle-aged cohort. His analysis of 1967 hourly wage rates demonstrates that the returns to training are higher for blacks than for whites in both cohorts. Noting that the opposite differential obtains in the case of schooling, he observes that while the

smaller investments of blacks (relative to whites) in education are consistent with the differential returns, the lower rates of investment in training by blacks are paradoxical. He does acknowledge that the differences may reflect the lower opportunities of blacks to participate in company training programs (22:525-26).

Freeman has also investigated the effects of various kinds of training on the earnings of middle-aged men. He finds that several measures of earnings bear a significant positive relationship to all types of training except that obtained in military service. However, training in a business college or technical institute shows the most pronounced influence on earnings--comparable in size to that of formal schooling (23:314). Like Flanagan, Freeman also finds that black men are less likely than whites to have had such training, even though they enjoy greater benefits from it than white men do.

Leigh has shown that the generalizations emerging from these analyses of earnings are equally relevant to occupational attainment and occupational mobility. For both age cohorts of males, upward occupational mobility between 1966 and 1969 bears a stronger relationship with formal educational attainment for whites than for blacks; on the other hand, post-school vocational training has a stronger influence among blacks than among whites (31:8).

Health

Two measures of health are contained in the NLS. One simply asks the respondent to rate his or her health relative to that of other persons of about the same age as "excellent," "good," "fair," or "poor." The other,

which has been more extensively used, inquires whether the respondent has any health problem or condition that limits the amount or kind of work he or she can do. Both measures have been shown to be related to several dimensions of labor market success.

As would be expected, health problems are more prevalent among the middle-aged men than among any of the other NLS cohorts. In the initial survey, about one-fourth of the respondents reported health problems affecting the amount or kind of work they could do (1:30). This compared with about one-fifth of the older cohort of women (10:31) and considerably smaller proportions of the young men (5:18) and young women (14:80). By 1971, the proportion of the middle-aged men who reported health problems had increased to approximately three-tenths, and was as high as four-tenths among those in their early sixties (4:14).

A dramatic illustration of the impact of poor health on labor force participation is provided by the contrast between the trend of labor force participation rates between 1967 and 1971 for the entire sample of middle-aged men and for healthy men alone. For the total cohort of white men, the participation rate fell from 95.3 to 86.6 percent, and for blacks from 93.5 to 83.0. When attention is confined to those men who reported no health problems in any year, the participation rate of whites fell only from 99.5 to 96.2, while the corresponding percentages for blacks were 99.7 and 97.0 (4:252-253). Two aspects of these findings deserve emphasis. First, as compared with an overall drop in the participation rate of 9 percentage points, the drop among healthy men was only about three percentage points. Second, when only healthy men are considered, the

racial differential in labor force participation completely disappears. In contrast to an overall 3.6 point differential in favor of white men in 1971, the differential among healthy men was 0.8 point in favor of blacks.

Admittedly, there are certain ambiguities, particularly among men, in cross-sectional data on the relationship between health and labor force participation, since poor health is virtually the only socially acceptable excuse for not working among working-age men. However, longitudinal data demonstrate that to a substantial degree the direction of causation is truly from poor health to withdrawal from the labor force rather than from withdrawal to a report of bad health. For example, among men in the labor force in 1966 the probability of retirement between then and 1971 was twice as great for those reporting a health problem in 1966 as for those who were free of health limitations at that time (39:175). Similarly, a study of the withdrawals from the labor force that occurred between the first (1966) and second (1967) surveys of the middle-aged men found that while only one-fifth of all of the men in the labor force in 1966 reported a work-limiting health problem, such limitations were reported by three-fifths of those who were to drop out of the labor force during the subsequent twelve months (38:8). This same study, incidentally, investigated the process whereby poor health leads to labor market withdrawal. It reported that

> Where poor health is responsible for withdrawal from the labor force it commonly compels a man to quit his job, often one in which he has had a long period of service. However, a not uncommon pattern is one in which unemployment and poor health combined, sometimes with the additional disadvantage of limited education, are responsible for the withdrawal. In some instances of labor force withdrawal,

> in other words, a man in poor health loses his job for reasons which have nothing to do with his health condition; withdrawal from the labor force in these cases appears to be attributable more to the limited re-employment prospects of such a man than to the fact that he is literally unable to work (38:23).

Health has an influence on aspects of labor market status other than labor force participation. In a simple tabular analysis of data for white middle-aged men who were married and living with their wives and who were employed as wage and salary workers in 1966, Davis demonstrated that within each of three educational categories (8 years, 9-11 years, and 12 years), men who reported limitations on either the amount or kind of work they could do had substantially lower earnings than those without such limitations; the differential for those with exactly 12 years of schooling was $1,525. These differences in annual earnings reflected both lower wage rates and less regular employment, with the unhealthy men generally experiencing more time out of the labor force and more unemployment than their healthy counterparts (20:46-49).

Several studies using multivariate analysis have confirmed the influence of health upon hourly earnings for the middle-aged men (17:291-296;22:524) and have demonstrated a similar influence in the case of young men (22:525) and for at least some categories of women in their thirties and forties (26:110). Also, Adams has confirmed by multivariate methods that health limitations (among middle-aged men able to work) contribute to more time outside the labor force and to higher unemployment than are experienced by healthy men (17:291-296). The degree of job satisfaction of middle-aged men has also been shown to be related to their rating of their health, even when such other factors as age, race,

occupation, and education are controlled (34:11). Finally, there is evidence that, other things being equal, good health enhances the likelihood of upward occupational mobility over the working lives of women who were in their thirties and early forties in 1967 (41:76).

Labor Market Information

Although labor market theory views the accumulation of information about jobs as a form of investment in human capital with a payoff in higher earnings, relatively little attention has been given by labor economists to analyzing variations in the extent of labor market information or to ascertaining whether the extent of such knowledge is in fact related to objective measures of labor market success. Investigation of these questions on the basis of the NIS data has proceeded farthest in the case of the young men. For that cohort a simple labor market information test was administered in the initial survey in 1966, consisting of three components: (1) multiple-choice questions asking respondents to identify the duties of ten occupations ranging from hospital orderly to economist; (2) questions on the typical educational attainment of men in these same occupations; and (3) questions on each of eight pairs of occupations as to which yields the higher average annual earnings (37:46-47).

Multivariate analysis of the variation in scores conducted separately for students and nonstudents--and within each of these categories for blacks and whites--showed that years of schooling, IQ score, and socioeconomic status are all strongly related to the extent of labor market information for all four groups. Also, growing up in a large city imparts a net advantage in labor market information as compared with growing up on a

farm (37:49). The evidence also shows that the amount of labor market information a youth has influences both the type of work he is able to get and the amount of money he is able to earn. That is, controlling for educational attainment, IQ, socioeconomic status, and several other factors known to be related to earnings, the 1966 occupational information test scores were found to be positively related to the youth's earnings two years later, as well as to the socioeconomic level of the occupation he held. A literal interpretation of the regression coefficients suggests that an increase in occupational knowledge equivalent to a five-point rise in the test score--less than one standard deviation--would yield a gain in annual income of about $140 for a steadily employed white youth and $290 for a black (37:53).

The occupational information test used in the NLS for young women differs fairly substantially from that for the young men, and the data have not yet been analyzed as systematically as have those for the males. Nonetheless, there is evidence that the amount of occupational information that a young woman has is also very strongly related to the amount of education she has had, her mental ability, and her socioeconomic status. As is true among the young men, even with these other factors controlled, blacks appear to have less information than whites (15:51-55). On the basis of cross-tabular analysis, the extent of labor market information appears to make a difference with regard to the young woman's employment situation. For example, among young women 18 to 25 years of age with exactly 12 years of schooling, those with high test scores in 1969 had higher labor force participation rates, higher rates of pay, and a greater

likelihood of being in white collar jobs than those with more limited occupational information (15:57).

An indication of the absence of realistic labor market knowledge among young women enrolled in school is provided by a study of unemployed young women with previous work experience, which showed that 45 percent of the white and 61 percent of the black students were seeking jobs with wage rates that exceeded by 20 percent or more what employed youth with comparable characteristics were earning. The proportions of non-students with such unrealistic expectations were only 4 percent and 15 percent for the whites and blacks, respectively (21:40).

While there is no formal measure of labor market information for the middle-aged men analogous to that for the youth, a question was asked in the 1966 survey that may be viewed as a proxy for knowledge of the job market. Respondents were asked what they would do if they lost the job they then held. The substantial majority who responded that they would seek other work were then asked whether there were any particular employers to whom they would apply. It is instructive to note that of the men who were asked this question, about two-thirds of the whites and three-fourths of the blacks were unable to cite any specific companies. If those who were able to do so are assumed to have had better knowledge of the labor market than those who were not, there is some reason to believe that superior labor market information "pays off" for that cohort also. For example, among men with exactly twelve years of schooling who were employed as wage and salary workers, those who were able to mention prospective employers enjoyed a higher average rate of pay than those who

could not. The differential was 14 cents per hour in the case of white men and 32 cents in the case of blacks (3:74-75).

Initiative

Individuals differ not only in health and vigor, productive skills, and labor market knowledge, but also with respect to motivation and initiative, and it seems reasonable to suppose that variations in these attributes will also be related to various indicators of labor market success. The variable used to represent this characteristic in the NIS is an abbreviated version of the Rotter I-E Scale,* which purports to measure variations in perceived "internal-external" control--i.e., the extent to which an individual perceives success as being contingent upon personal effort ("internal") as opposed believing that success is largely a matter of luck, or at least of forces not amenable to the control of the individual ("external"). It may be hypothesized that "internals," who perceive a payoff to the exercise of initiative, are more likely than "externals" to be on the lookout for more attractive job opportunities, to conduct diligent job searches, and to behave in ways that make them attractive to employers. As a consequence, they may be expected to earn higher wages and to be employed in higher status and psychologically more satisfying jobs.

These hypotheses have been systematically explored in the case of the middle-aged men by Andrisani and Nestel. For respondents employed as

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*Julian B. Rotter, "Generalized Expectancies for Internal Versus External Control of Reinforcement." Psychological Monographs 609 (1966).

full-time wage and salary workers in both 1969 and 1971, they investigated the net relationship in each of these two years between degree of internality and (1) occupational status, (2) average hourly earnings, and (3) job satisfaction.* A significant relationship existed in all cases for white men, and in the case of average hourly earnings only for blacks (19:207). Next, the longitudinal character of the data was exploited by relating degree of internality as measured in 1969 to seven measures of subsequent labor market experience, including annual earnings in 1970, change in job satisfaction between 1969 and 1971, and change in annual earnings between 1968 and 1970. For both blacks and whites a significant net relationship between degree of internality and each of these three criterion variables was found. Moreover, a number of the relationships were also discernible among that portion of the sample employed by the same employer over the two-year period, which led the investigators to conclude that

> . . . there are several ways in which initiative may lead to success. Among the total sample . . . internals may tend to seek out more advantageous employment opportunities and to advance more rapidly than comparable externals by having greater awareness of and being more responsive to labor market opportunities. But for internals who do not choose to shift employers . . . initiative is apparently recognized and rewarded by employers through greater intrafirm opportunities for advancement (19:211).

The causal link between initiative and superior status in the labor market is intuitively plausible. One may legitimately wonder, however, whether an influence may not flow in the opposite direction as well--i.e.,

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*Controlling for education, training, health, tenure, age, marital status, region of residence, and city size.

whether favorable labor market experiences may not encourage (and unfavorable experiences discourage) the belief that the individual is "master of his own destiny." The fact that the modified version of the I-E scale was administered to the respondents both in 1969 and in 1971 allowed Andrisani and Nestel to explore this question.

After first demonstrating that the changes in test scores over the two-year period were sufficiently large as to indicate real changes in attitude rather than simply the unreliability of the measure, the investigators regressed the actual difference scores on several aspects of the respondents' experience over the two-year period. The control variables incorporated into the regression were such that the researchers were in essence asking whether men who were equal in I-E score and other relevant characteristics at the beginning of the period changed their perception of the "locus of control" in ways that were consistent with changes in their personal circumstances. The results of the analysis suggested an affirmative answer to this question. Specifically, upward occupational mobility, improvement in annual earnings, re-entry into the labor force, and the absence of unemployment were found to be related to increasing internality (19:218).

In view particularly of the advanced age of the respondents, Andrisani and Nestel interpret their findings as suggesting that the early formation of external attitudes is not necessarily a permanent liability. External outlooks may reflect unfulfilled expectations and lower returns to initiative in the past; thus, "opportunities for success, and success itself, are effective means for raising initiative . . ." (19:221).

Other Attitudes

While not necessarily related to earnings, occupational status, or employment stability, other attitudinal measures made available by the NLS have been shown to bear significant relationships to various aspects of labor market behavior. For example, a woman's attitude toward the "proper" role of women with young children has been shown to bear a strong relationship to the extent of her own labor force participation both currently (27:78-79) and in the past (41:66). An even stronger influence on the extent of labor market activity of married women is exerted by their perceptions of their husbands' attitudes toward their working (27:79). While one must be cautious in accepting evidence of these kinds because of ambiguity in the direction of causation, the longitudinal nature of the NLS data has permitted at least limited evidence to be adduced that young women's attitudes toward the proper role of women, measured before their marriage, are related to their labor force participation after they become mothers (36:247). To the extent that such attitudes do indeed have an independent influence on behavior, there is reason to believe that they help to account for the increases that have occurred in female labor force participation, for there is evidence that the attitudes of women in their thirties and forties as well as those of their husbands became somewhat more favorable to market work by the wives over the five-year period 1967-1971 (13:13-14).

Attitudinal factors have also been found to be important determinants of early retirement on the part of the middle-aged men; in this case there can be no serious question about direction of causation, since the attitudinal measures are found to predict behavior. For example, men who

in 1966 manifested a low commitment to the work role were, other things being equal, almost twice as likely to have retired by 1971 as those with high work commitment. Similarly, other things equal, the likelihood of retirement was significantly related to the degree of satisfaction the man had expressed with his job in 1966. For a worker "average" in all other relevant respects, the likelihood of retirement was only 7.7 percent if he had liked his job very much in 1966, but 13.2 percent if he had disliked it (39:176-177).

Non-Attitudinal Factors in the Retirement Decision

To emphasize the relevance of attitudinal factors in the retirement decision is not to suggest that they are the most important determinants of early retirement. As has already been indicated, poor health is a very important factor in leading to withdrawal from the labor force prior to the conventional retirement age. Among the middle-aged men who had retired by 1971 (the oldest member of the cohort being 64), four-fifths reported health problems affecting work and over half had reported such problems as early as 1966. Of those reporting health problems in 1971, over a fifth were so severely handicapped that they could not go outdoors or use public transportation without assistance, and an additional one-fourth had difficulty in walking (39:180-181). A concomitant problem of early retirees is inadequate income. Of married men who were retired as of the 1969 survey, almost one-fourth of the whites and more than one-third of the blacks [illegible] family incomes under $3,000 in 1970 (39:320).

There is also evidence that financial ability to retire is a very important determinant of early retirement. For instance, the expectation

of retiring prior to age 65 expressed in 1971 by men between the ages of 50 and 60 varied monotonically according to the amount of private pensions they would be eligible to receive. For a man "average" in all other relevant respects, the likelihood of an intention to retire early rose from three-tenths for one who expected no pension to seven-tenths for one who expected to receive $600 or more per month in early retirement benefits (39:165).

Whatever the causal factors, there is evidence suggesting increasingly favorable dispositions toward early retirement on the part of men in middle age. In this context, the difference between the cross-sectional and longitudinal relationship between age and the expectation of early retirement is instructive. In the cross-sectional analysis as of 1971, there is an inverse relationship between age and the expectat of early retirement. Yet, as the sample aged five years between the 19 and 1971 surveys, the proportion of men expressing an intention to retire prior to age 65 increased by about 10 percentage points. Because these are the same individuals at both points in time, the phenomenon cannot be attributed to inter-generational differences in attitudes. It doubtless reflects the increasing prevalence and liberality of early retirement provisions in pension plans, as well perhaps as some genuine changes in preferences for leisure relative to income (39:192).

There is one other point relating to retirement that is worthy of emphasis. As of 1966, a little less than half (45 percent) of wage and salary workers were employed in establishments with mandatory retirement, typically at age 65. Of those covered by such plans, exactly one-third reported that they would work longer than the stipulated age if they were

free to do so (1:175-177). Thus, on the basis of their expressed preferences at that time, it would seem that only a minority of the entire cohort (.33 x .45 = 15 percent) will be compelled to retire at an earlier age than they would choose.

Race

In virtually every aspect of labor market experience that has been examined with NLS data, and for all four cohorts, blacks have been found to fare less well than whites. Gross racial differentials in such variables as wages, occupational status, and incidence of unemployment are, of course, to be expected as the result of the relative disadvantage of blacks in the characteristics (e.g., education) that affect one's status in the labor market. But the inferior labor market position of blacks persists even when these factors are controlled as fully as possible; and the richness of the NLS data have permitted more complete and more adequate controls than most other bodies of micro-data--especially with respect to IQ in the case of the two cohorts of youth and with respect to a number of attitudinal measures in all cohorts.

In one of the earliest investigations of this question, Kohen used path analysis to show that at least for young men who enter high school, there is no evidence that discrimination in educational opportunities accounts for the racial differential in educational attainment. On the other hand, he estimated that about one-fifth of the observed real wage differential between white and black young men is attributable to labor market discrimination--that is, cannot be accounted for by differences

between the two racial groups in the characteristics that are related to earnings. Kohen's estimate of the portion of the racial differential in occupational status attributable to labor market discrimination is much larger--70 percent (28:150-151). For the same cohort of youth, Hall and Kasten found a substantial improvement in the entry occupations of blacks during the 1960's, so that by the end of the decade a black with the same human capital characteristics as a white could expect an equal position in the occupational hierarchy. This analysis, however, was based on only five very broad occupational categories (25:781-785).

In his previously noted study designed to test the dual labor market theory, Andrisani found that among male youth who did not go beyond high school, high school graduation was less likely to lead to an initial job in the primary labor market for a black than for a white youth (18:60-66). Moreover, in analyzing wage rates of the youth in both the primary and secondary labor markets in 1968, he found less evidence of a systematic "screening process" relating wages to human capital factors for blacks than for whites in the primary market. In the secondary market, there were no significant relationships between human capital variables and wage rates for blacks, although for whites there were substantially the same relationships as in the primary sector (18:78-79).

There is also evidence of racial discrimination in the earnings of young women, although it is evidently less pronounced among them than among males. Using identical models to study the determinants of the earnings of young men and women between the ages of 18 and 25 who had attended at least the first year of high school, Kohen and Roderick

calculated that one-fourth of the gross race differential of 51 cents per hour among the young men was attributable to current labor market discrimination. On the other hand, of the 23-cent differential between the earnings of the white and black females, only 13 percent could not be attributed to differences between the two groups in characteristics presumed to influence productivity (30:29).

With respect to the cohort of middle-aged men, Andrisani and Nestel have made an estimate of the proportion of the total black-white difference in occupational status that can be explained by factors in their model that are presumed to be related to productivity. Of the 20-point difference in the mean Duncan Occupational Status Index between the two groups, only about five points can be attributed to differences between blacks and whites in such factors as educational attainment, training, health, and degree of internality. Thus, approximately three-fourths of the difference presumably reflects the fact that blacks with given characteristics are denied access to occupations that are open to whites with equivalent characteristics (19:213-14).

Finally, analysis of the occupational status and occupational mobility of women in their thirties and forties suggests the presence of labor market discrimination with respect to job moves made by the women even in relatively recent years. Regression analysis of the number of years of schooling achieved by these women indicates no discrimination in educational opportunities. That is, once controls are introduced for such factors as parents' education and father's education, no significant net difference in educational attainment of blacks and whites is evident. However,

controlling for education and other background factors, there remains a significant racial differential in the occupational status of the first jobs these women took upon leaving school. Moreover, controlling for starting position, black women fared more poorly than whites with comparable characteristics over the period between first job and 1967 and even over the five-year period between 1967 and 1972 (41:70-82).

Sex

Men and women differ with respect to many aspects of labor market experience--especially in the constancy of their labor force participation. The question at issue here, however, is whether women and men with similar characteristics--including their exposure to the labor market--are treated equally or whether there is evidence of labor market discrimination based upon sex.

As Kohen and Rodgrick observe in their analysis of the earnings of young men and young women, sex discrimination is even more difficult to document than race discrimination. For one thing, the difference in occupational distributions between the sexes of each race is much greater than between blacks and whites within each sex. For another, it is less clear in the case of sex than of race that the labor market disadvantage in occupational distribution results from employer discrimination rather than from the educational and job decisions that the "disadvantaged" have been conditioned to make.

Nevertheless, when differences in occupational distribution are ignored and earnings are related to such determinants of productivity as education, mental ability, and work experience, there is evidence of discrimination

against women that is considerably greater than that based on race. Specifically, Kohen and Roderick estimate that over nine-tenths of the observed female-male wage differential is attributable to sex discrimination, whereas less than one-fourth of the black-white differential is attributable to current racial discrimination (30:32). Elimination of sex discrimination would increase the female-male wage ratio from .76 to .98 for whites and from .82 to 1.06 for blacks. On the other hand, eliminating racial discrimination would increase the black-white wage ratio from .83 to .87 for men and from .90 to .91 for women. Thus, while black women are doubly disadvantaged, "being a woman is much more a handicap than being black in achieving labor market success" (30:28-30).

III LESSONS FOR HUMAN RESOURCE POLICY

Drawing policy conclusions from the kinds of research findings that have been summarized in the preceding pages is an intimidating assignment. To begin with, policy prescription never emerges unambiguously from research, regardless of its nature. Not until analysis is blended with values is there a basis for judging what types of intervention, if any, are warranted. Moreover, the NLS has clearly not been designed to focus on such specific policy issues as whether it would be better to expand one type of training program rather than another. Whatever basis for policy prescription the NLS research affords stems from the insights it provides into the way in which labor markets operate and into the factors that are influential in assuring successful accommodation to the world of work. The NLS findings have, I think, provided somewhat sharper insights into these matters; in

any event, they have conditioned my thinking about the requirements of human resource policy in several respects that I should like to elaborate in this concluding section of the paper.

Major Premises

First let me set forth the premises underlying the policy recommendations I shall make:

1. The object of human resource policy is to enhance the effectiveness and the satisfaction of human beings in their productive roles in order to serve both individual and social goals.

2. Viewed in this light, human resource policy has a variety of facets, most of which can be subsumed under the headings of human resource (a) development, (b) allocation, (c) conservation, and (d) utilization. In designing a human resource strategy, it is necessary to consider all of these aspects simultaneously, since there are important interrelations among them.

3. Perhaps the most important single goal of human resource policy is to assure useful employment opportunities for all who want them. This basic goal has implications for both the demand and the supply sides of the labor market. On the demand side it means that there must be jobs for all who want them. This is a necessary condition, for without it the best one can hope to accomplish is to ration as equitably as possible an inadequate number of employment opportunities.* A second basic requirement on the

*I recognize a theoretical exception to this proposition. To the extent that there are structural problems resulting in skill bottlenecks, it is possible to expand total employment opportunities merely by training individuals for the demanded skills, and indeed to expand employment by an amount greater than the number of trainees. I do not regard this to have been an important part of the problem in recent years.

demand side of the market is that there be no discrimination in employment opportunities based on factors unrelated to productivity, for the existence of such discrimination means that there are categories of "disadvantaged" individuals for whom intervention on the supply side of the market will be of no avail. On the supply side, public policy must be directed at assuring that the characteristics of individuals seeking employment are such as to maximize their likelihood of finding it. In addition to vocational skills, these characteristics include attitudes and personality traits that are associated with successful performance in the labor market, as well as "labor market skills," i.e., the kinds of knowledge essential to making decisions about alternative kinds of work and to locating and obtaining specific jobs.

4. Human resource policies have a short-term and a long-term dimension. Long-term policies directed at the supply side of the market are those designed to insure that individuals will have characteristics enabling them continuously to adapt to the requirements of the labor market. Short-term policies on the supply side are directed at those who are experiencing labor market difficulties of one kind or another--that is, those for whom the long-run policies have for some reason not been effective. Interventions on the demand side may also be thought of as having long- and short-term aspects. Short-term measures are those designed to assure adequate levels of aggregate demand. Long-term measures aim at developing employment opportunities for those who are likely to remain without work even in a "full employment" economy.

In the light of the foregoing, human resource policy in the United States seems to me to have suffered from three major limitations. First,

it has given insufficient attention to the demand side of the equation. In the absence of profound structural problems, unemployment rates during all but four or five years of the past decade-and-a-half have been sufficiently high that it is unlikely that training programs alone could have accomplished much more than to redistribute employment opportunities. Second, on the supply side human resource policy has given inadequate emphasis to long-run as compared with short-run programs. At the risk of over-simplification it might be said that relatively too much attention has been given to serving the disadvantaged, and relatively too little attention to preventing labor market disadvantage from developing. Finally, there has been inadequate integration of human resource policy. For example, although it is recognized that what goes on in schools can bear an important relationship to what goes on in the labor market, programs relating to each of these areas are within the jurisdiction of different individuals with different bodies of knowledge and expertise. The following paragraphs elaborate these points with specific reference to some of the NLS findings that have been reported in the earlier sections of the paper.

Increasing the Demand for Labor

As has been indicated, the NLS data demonstrate what theory suggests and what other evidence also confirms--that labor markets operate more effectively and that the "disadvantaged" fare relatively better when overall unemployment rates are low than when they are high. Thus, the most important single policy for guaranteeing useful employment opportunities for everyone is maintaining high levels of aggregate demand for labor. Moreover, as has been argued above, unless this is done, other approaches are unlikely to be very effective.

There is not likely to be much disagreement with the foregoing observation. The difficulty, of course, lies in implementing the prescription in the light of other social objectives with which this one may collide, especially the avoidance of unbearable inflationary pressures. Stated in this way the issue is one of general economic policy rather than human resource policy per se, and is certainly too broad and complex to be dealt with here in any but a most superficial manner. I would merely observe that there is a substantial body of respectable opinion that holds that aggregate demand, at least under present circumstances, can be stimulated without exacerbating inflationary pressures, particularly if measures such as wage and price controls are taken concurrently in order to reduce the threat posed by the segment of the economy in which prices and wages are administered.*

Beyond this, it seems to me that the least inflationary way to expand employment opportunities in the long run, and especially for the disadvantaged, is through public employment. The reason is fairly straightforward. To induce the private sector to absorb individuals at the end of the employment queue may well require a stimulation of total demand to levels that the economy cannot endure; such individuals, however, might actually be given preference in public programs. In addition to their use along with other measures during cyclical downturns, carefully designed public employment programs can serve to provide transitional employment opportunities to

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*See TIME, September 22, p. 63; December 22, pp. 59, 61; Gardiner C. Means, "Simultaneous Inflation and Unemployment: A Challenge to Theory and Policy," Challenge, September/October, 1975, pp. 6-20.

those whose principal need is for work experience, and more-or-less permanent jobs for those who are unlikely under any circumstances to be absorbed into the private sector. Among the potential benefits of such programs must be counted the social services they will yield as well as their contributions to the preservation of human dignity. I am mindful of the problems that have arisen in the administration of the Emergency Employment Act and of Titles II and VI of CETA,* but see no reason why they cannot be overcome, especially if new models are developed that do not depend exclusively on hiring by state and local governments.

Long-Term Policies of Human Resource Development, Conservation and Allocation

The substantial relationship that has been seen to prevail between good health and many aspects of success in the labor market makes it clear that efforts to reduce the incidence of disability would constitute an effective long-run measure for preventing a deterioration of labor market position, especially among older workers. Thus, policies directed at improving the health of the population deserve support not only because good health is an important objective in its own right, but because it would contribute to the amelioration of labor market problems and to the fuller and more effective utilization of the nation's human resources.

Another very important long-run measure for preventing labor market disadvantage and for strengthening the operation of labor markets is to improve the extent and quality of those kinds of labor market information that are essential to rational occupational decisions. While this would

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*See National Commission for Manpower Policy, Proceedings of a Conference on Public Service Employment, Special Report No. 1, May 1975.

seem to be a worthwhile objective for all segments of the population, it is particularly crucial for youth in order to permit them to make reasonably rational career choices. The NIS findings--and other studies as well--make it clear that most youth are far from having the kind of knowledge that would permit them to make occupational choices in the manner suggested by the utility-maximizing model of conventional economic theory. The data also demonstrate that there are substantial differences in the extent of such knowledge by social class and by race, and that these differences in extent of information are reflected in differences in labor market status, even over a period as short as two years.

The NIS findings suggest the need to increase the occupational sophistication of youngsters generally, but especially among rural youth, among blacks, and among those in the lower socioeconomic strata. This process of creating an understanding of all of the aspects of the world of work must not be left to high school counsellors, because many of the factors that are crucial to the process of occupational choice begin to operate long before the youngster gets to high school. The process must start in kindergarten and it must be directed at parents as well as children, for much of the understanding that affects the kinds of choices young people make is generated in the home rather than in school.

To the extent that better labor market information improves the quality of job choices of youth in their early period of accommodation to the labor market, it should help to reduce the high turnover rates among youthful workers, which would contribute to a reduction in their unemployment rates. However, the most important consequence of better labor market information on the part of youngsters and their parents would

be greater equality of opportunity and, ultimately, of income. I have suggested elsewhere (35:176-179) that a likely consequence of better information would be increased relative supplies of white collar workers, with a consequent compression of occupational wage differentials. This prediction, of course, rests on the judgment that, given complete information, occupational wage differentials are currently larger than they need be to attract existing numbers into the higher-paid occupations. In addition to reducing inequality of opportunity according to socioeconomic status, better labor market information could also reduce inequality of opportunity between the sexes, particularly if efforts were made to provide information to members of each sex about occupations that have stereotypically been associated with the other.

Perhaps the most fundamental long-term human resource policy relates to the development of vocational skills and know-how. The NLS data do not provide any clear guidelines in this respect, but they do serve to indicate the extent of our ignorance. For example, we know surprisingly little about the nature of the link between education and labor market success. We know incontrovertibly that there is a link--that the more education a person has the better off he or she is likely to be in the labor market--but precisely why that is so we do not know. We do not know to what extent it results purely from credentialism, from the increased docility that the educational process engenders, from the fact that education contributes kinds of wisdom and understanding that make people more productive, or from the implantation of specific kinds of skills. In point of fact, we do not know what the educational "production process" really is, and it would seem to be self-evident that unless one does, one builds curricula rather blindly.

As has been seen, at least one careful study based on NLS data has concluded that vocational programs at the high school level, despite their higher cost than other curricula, confer no initial labor market advantages on the youth that pursue them relative to those who have graduated from the general curriculum. Even though this finding cannot be accepted as definitive, it suggests that we need to know a great deal more than we do about the specific relationship that exists between what goes on in the classroom and what goes on later in the world of work. We need to know what is the proper mix of training in the school and out of school in generating the competencies that are required for various kinds of careers. To arrive at reasonably confident answers to questions of this kind, it would be profitable to have carefully designed experimental programs that are developed, monitored, and evaluated jointly by teams of labor market and educational specialists. Such programs would require considerable resources and considerable time, but the potential payoff is great.

Short-Term Human Resource Development Policies

The NLS data relating to the effects of training outside the regular school system suggest that it can be a powerful instrument for improving wages and occupational status. They also suggest, however, that there are substantial variations in the effectiveness of training depending upon its type and upon the characteristics of the individuals who receive it. For example, the fact that black males are less likely to get training than white males despite the fact that the returns are greater for the former than the latter suggests that public training programs or the subsidization of company training programs for blacks may be a particularly effective

means of overcoming labor market disadvantage for them. The finding that white men in middle-age are unlikely to profit from training suggests that instruments other than training--e.g., public employment--are probably more appropriate for improving the position of that group.

However, it is difficult to be satisfied with the extent and precision of our knowledge about whether and under what circumstances training has a real impact on labor market position. A reasonably clear prescription for policy is that a research component be incorporated into training programs. Attempts to evaluate such programs have consistently been bedeviled by the absence of adequate control groups. Methodologically, the solution is clear: randomization of the selection process. Until and unless programs become extensive enough to accommodate all who wish to enter, such an approach poses no ethical problem and it promises to provide a clearer guide to future policy than is otherwise likely to exist.

NLS evidence concerning the impact of initiative on labor market position supports the desirability of building into training and employment programs attempts to improve the motivation of disadvantaged individuals. However, the fact that there is apparently also a reciprocal influence of labor market experience on initiative makes it clear that such attempts are likely to be futile unless efforts are made concurrently to modify the opportunity structure so as to allow initiative to be rewarded. Because individual motivation and environmental influences are interacting, an effective program of intervention requires addressing both sets of factors simultaneously.

Human Resource Utilization Policies

The substantial evidence of the restricted opportunity for blacks to enter the more attractive occupations even when their measured human capital endowments are equal to those of whites argues for a continuous and conscientious effort to combat racial discrimination in the labor market. Of course, programs to eliminate differentials in human capital endowments are also important. As has been noted, the discrepancy in labor market rewards between men and women with comparable productivity characteristics is even greater than that which prevails between blacks and whites. Thus, the campaign to combat labor market discrimination on the basis of sex must also continue. In this case, conscious efforts to alter the socialization process for males and females are also necessary. As has been indicated, carefully designed programs of occupational information might be helpful in this respect.

A final policy issue on which the NLS data have something to offer relates to retirement, although this does not fit neatly into the same framework as the other matters that have been discussed. To begin with, the data would seem to indicate that only a minority of men employed as wage and salary workers are being prevented by mandatory retirement plans from working as long as they wish. This suggests that the problem may have been exaggerated, but not that it doesn't exist. Social policy in this regard should permit as much individual freedom as possible.

As many as two-fifths of men in their fifties already expect to retire before the conventional age of 65, and this proportion will probably grow, particularly if there is continued liberalization of public and private

programs of early retirement benefits. If society does indeed opt for facilitating early retirement, some attention needs to be paid to developing diverse opportunities for the constructive use of leisure time. On the other hand, it is clear that a substantial number of early retirements are not planned or intended, but are rather attributable to disabilities that result either from traumatic illness or injury, or from a gradual deterioration in health. In many of these cases the policy prescription is for more liberal levels of financial support, for the evidence indicates that many early "retirees" currently have woefully low incomes and meager asset holdings.

IV AFTERWORD

A summary of a project as lengthy, complex, and amorphous as the NLS is inevitably colored to an unusual extent by the interests and perspective of the individual who has undertaken it. Even more so is policy prescription uniquely influenced by point of view. Thus, another reviewer would doubtless have chosen a somewhat different set of findings to emphasize and would perhaps have drawn different policy conclusions from the evidence. Fortunately, however, there is a countervailing safeguard. The NLS data have been analyzed by a rather large number of researchers with a variety of interests and with divergent points of view. Thus, to the extent that I have ignored significant research findings or have drawn what others consider to be unwarranted conclusions, I am unlikely long to go unchallenged.

Selected Reports Based on National Longitudinal Surveys

Comprehensive Reports

The Pre-Retirement Years (Manpower Research Monograph no. 15)

1. Vol. 1, by Herbert S. Parnes, Belton M. Fleisher, Robert C. Miljus, and Ruth S. Spitz
2. Vol. 2, by Herbert S. Parnes, Karl Egge, Andrew I. Kohen, and Ronald M. Schmidt
3. Vol. 3, by Herbert S. Parnes, Gilbert Nestel, and Paul Andrisani
4. Vol. 4, by Herbert S. Parnes, Arvil V. Adams, Paul Andrisani, Andrew I. Kohen, and Gilbert Nestel

Career Thresholds (Manpower Research Monograph no. 16)

5. Vol. 1, by Herbert S. Parnes, Robert C. Miljus, and Ruth S. Spitz
6. Vol. 2, by Frederick A. Zeller, John R. Shea, Andrew I. Kohen, and Jack A. Meyer
7. Vol. 3, by Andrew I. Kohen and Herbert S. Parnes
8. Vol. 4, by Andrew I. Kohen with the assistance of Paul Andrisani
9. Vol. 5, by Paul Andrisani and Andrew I. Kohen

Dual Careers (Manpower Research Monograph no. 21)

10. Vol. 1, by John R. Shea, Ruth S. Spitz, and Frederick A. Zeller
11. Vol. 2, by John R. Shea, Sookon Kim, and Roger Roderick
12. Vol. 3, by Carol L. Jusenius and Richard L. Shortlidge, Jr.
13. Vol. 4, by Herbert S. Parnes, Carol L. Jusenius, Francine Blau, Gilbert Nestel, Steven Sandell, and Richard L. Shortlidge, Jr.

Years for Decision (Manpower Research Monograph no. 24)

14. Vol. 1, by John R. Shea, Roger D. Roderick, Frederick A. Zeller, and Andrew I. Kohen
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APPENDIX C

LESSONS FROM THE NATIONAL LONGITUDINAL SURVEYS: A COMMENTARY

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LESSONS FROM THE NATIONAL LONGITUDINAL SURVEYS: A COMMENTARY

Arvil V. Adams*

From 1972 to 1974 I served as a Research Associate for the National Longitudinal Surveys (NLS) with direct responsibility for the fifth-year report of middle aged men. I draw upon this background today in my discussion of Herbert Parnes' paper. As I look back at the past decade of longitudinal research and its implications for human resource policy, I plan to consider the following questions: What have been the unique insights into labor market behavior gained from the use of longitudinal data and what are the policy implications thereof? After a decade of longitudinal research, what are some of the remaining gaps in our knowledge of labor market behavior and of what value will longitudinal research with NLS data be in closing these gaps?

Looking at the record of longitudinal research I would list three general categories of research in which we have gained unique insight into the labor market behavior of certain individuals and groups. As an outline to my comments I list these categories below:

1. research into questions about social and economic mobility whose analyses involve information subject to recall error,
2. research into questions about the causal ordering of behavioral relationships, and
3. research into questions requiring controls for a variety of influences upon behavioral relationships.

*Associate Professor of Economics and Associate Director of the Human Resources Institute, the University of Utah. This discussion paper was presented to the Conference on Manpower Research and Policy sponsored by the National Commission for Manpower Policy and National Council on Employment Policy, Washington, D.C. February 26-27, 1976.

Longitudinal data for the first time have given us a base of information designed to test the life-cycle planning theories of economics. Longitudinal data give us, for example, a snapshot of the age-earnings profile and the age-occupation profile which is relatively free of recall error. From this have come considerably more rigorous tests of the human capital literature concerning migration, job mobility, education, training, health, and information. In many cases the known has been confirmed, but in others new insights have been gained through longitudinal research. I would cite only two of these here in discussing the importance of labor market information and tests of dual labor market theory. It is important to understand, for example, that secondary labor markets do not represent impenetrable barriers to all, that upward mobility into the primary sector does occur. While it is important to know this, effective public policy, as I will suggest later, will require that much more be known about the factors which influence this mobility.

Cross-sectional data have in many cases left us uncertain about the causal ordering of some variables and their relation to labor market behavior. Longitudinal data have helped us remove this uncertainty. Longitudinal data, for example, have given strong support to the importance of attitudes in labor market behavior. Among these attitudes are the commitment to work and its relation to labor force participation; job satisfaction and its relation to interfirm mobility; and initiative and its relation to earnings and other dimensions of labor market success.

Among the most exciting contributions to policy made by longitudinal analysis are the findings concerning the importance of individual initiative, measured by the Rotter score. Not only have we learned that

initiative pays off in the labor market, but also that individual initiative can be shaped by the opportunity structure present. Initiative therefore need not be considered exogenous by manpower policy, but instead, can be treated as endogenous subject to policy control.

Although too little has been done with the relation of health to labor market success, the findings in this area using longitudinal data represent an important step forward in the development of effective manpower policy where older workers are concerned. With longitudinal data we are able to separate health impediments which are used as an afterthought to justify labor force withdrawal from impediments which are known to exist well in advance of actual withdrawal. As such, longitudinal data have helped us remove some of the uncertainty of causal ordering concerning health and labor force participation.

I turn now to the third area of research in which longitudinal data have made a unique contribution. Much of the research with longitudinal data has been cross-sectional in nature, not drawing upon the longitudinal character of the data. I attribute this to the bias of my own profession, economics, toward cross-sectional data and its analytical technology. Too little work has been done with the unique technological problems associated with analyzing longitudinal data.

Notwithstanding this, we have learned considerably more from NLS data than from other alternative cross-sectional data bases by virtue of the extensive controls available for social, psychological, and economic influences upon labor market behavior. No other data base to my knowledge provides a national sample of selected age cohorts with the comprehensive base of social, psychological, and economic information contained in the

NLS. Whereas other data bases may go into greater depth in any one information area, none offer the opportunity of the NLS data to simultaneously control for these separate influences. Our best example is drawn from studies of young men's and women's earnings where, in examining the impact of education and training, it is possible to separate this impact from the influence of ability (IQ) and initiative (Rotter). Such a step is important in developing effective programs and policies concerning young workers. As I will discuss in a moment, however, the breadth of NLS data while its strength is also its weakness.

After a decade of longitudinal research what are some of the gaps in our knowledge of labor market behavior that remain and what value will longitudinal data from NLS be in closing these gaps? Over 100 studies using NLS data have been completed. The cost of data development alone extends beyond 12 million dollars. Professor Parnes in his summary of the policy lessons from NLS studies has developed the following policy agenda:

1. maintenance of full employment
2. use of public employment to use inflationary pressures
3. investment in health services and technology
4. expansion of labor market information
5. improved access to education and training
6. enforcement of anti-discrimination policies
7. work options for the retired.

A cynic looking at this list might ask: did we need over 12 million dollars to tell us what we basically knew over a decade ago? For indeed, this list is no different from the policy agendas published a decade ago

by a number of manpower scholars present today.

Instead, what we need most is an understanding of the proper mix of policies required to overcome the economic disadvantage of some and to avoid this disadvantage for others. Longitudinal data have not yet given us this understanding, as acknowledged by Professor Parnes. From the work to date using longitudinal data we remain unable to assign weights to various policies. We do not know, for example, for middle-aged blacks the relative importance of investments in health, training, and anti-discrimination programs. Effective policy development requires this knowledge. Indeed, the breadth of information gathered by the longitudinal studies leads us to expect it, but, as I suggested a moment earlier, the breadth of NLS data is both its strength and weakness. Allow me to illustrate.

Given the space limitations of NLS survey instruments, it has not been possible to explore every issue in depth. Certainly some issues have been given low priority and others even omitted. In the case of postschool training, we are unable to calculate rates of return among alternative training sources for lack of information about the investment cost of these programs. More importantly, we do not know whether the individual, the firm, or society has borne the investment cost. As Professor Parnes suggests, the NLS data have not been designed to focus on such specific policy issues as whether it would be better to expand one type of training over another. Policy makers will require other research to fill this gap.

In the same vein, after a decade of NLS we still do not know very much about how skills are acquired. In fact, we know very little about how education relates to labor productivity and earnings. While recognizing that education is a multi-dimensioned production process, the NLS does not attempt

to measure these dimensions or help us understand the process whereby these products are produced. As such, we are not likely to learn much from this source about the substitutability of various modes of education in preparing people for the labor market. This is not to say that longitudinal data cannot help us understand these questions, but simply that NLS data are ill-suited for this purpose.

Much has been said about racial discrimination in the labor market using NLS data to measure its magnitude. As a guide to policy, I am not particularly impressed by the results. For the most part, this work has relied upon the residual method to measure the magnitude of racial discrimination. That is, the author accounts in the statistical model for "all" the objective labor market and personal characteristics that influence productivity, earnings, and other labor market outcomes. The variation which remains after these characteristics are accounted for is presumably due to racial discrimination. I am never very comfortable about the adequacy of our measures of these productivity characteristics or our ability to account for all such characteristics. Consequently, while accepting the need for anti-discrimination programs, I am uncertain about the weight that should be assigned to them in a comprehensive manpower program.

In the same context, I do not feel we have learned as much as possible from longitudinal data about the sources of economic disadvantage as distributed among the home, the community, and the labor market. Although it might be expected that longitudinal data from the NLS should help us, I am not particularly optimistic. Let me explain.

In relying upon statistical approximations of economic, social and psychological concepts, our methods are imperfect, often leading to problems

of interpretation. For example, a popular NLS measure of the influence of home background is something called an index of social economic status, or SES for short. It is comprised of several items including mother and father's education, father's occupation, and a measure of reading materials in the home. Let me suggest the alternative interpretations which can be given this measure and you, the audience, supply the policy implications: (1) SES may measure variations in pre-school investments of the family in a child's human capital, a la Gary Becker; (2) it may reflect the importance of parent role-modeling on the child's motivating and aspirations; (3) it may reflect variations in labor market information; (4) it may reflect variation in family financial assets and capital market imperfections; (5) finally, following some of the radical literature, SES may simply capture the importance of class structure and class barriers in society. How can we develop effective policy given this uncertainty? Although longitudinal data provide us with useful insights into the aggregate importance of a measure like SES, it seems clear that we will have to go into much greater depth with our analysis to fully understand the appropriate policy responses.

My list of gaps in our knowledge of labor market behavior is clearly incomplete. But it does serve to illustrate the point I wish to make, which is: the breadth of information contained in the NLS data will not often lead us to specific policy recommendations or the ability to select among policy alternatives. This is not to say that NLS data and longitudinal analysis have little policy payoff. For indeed, they have. What I am saying is that in many instances longitudinal analysis with NLS data will provide only a first step in the comprehensive, indepth analysis required to develop effective manpower programs and policies.

APPENDIX D

SELECTED COMMENTS ON RESEARCH AND POLICY

BY

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Selected Comments on Research and Policy

by

William Spring

The 1973 CETA legislation ought to mark the beginning of maturity for employment and training efforts. After a decade of experimentation with delivery systems and program formats we have established a national system responsive to local labor market needs and operated by a growing core of knowledgeable professionals. The promise is real. Most mayors and country executives with a domain of a hundred thousand souls or more, and every governor now has staff charged with understanding local labor market conditions and responding to them wisely.

But, as long as national policy decrees unemployment rates over 4 percent the performance of programs designed to help the poor will be disappointing. So before considering technical manpower matters it is important to say that economists concerned about the impact of the employment situation on the poor and upon the economy as a whole must press forward on two fronts. First, they should urge that the congressionally mandated sub-employment measure be developed and used so that the relationship between labor market conditions and poverty can be more widely understood. Second, they should participate actively and forcefully in the discussions concerning questions of achieving full employment rather than leaving that debate to the rhetoric of the right and the left. Research is seldom used objectively in the political process. But, when employment training and compensation programs built up painfully over the last thirty years are under academic attack then academics must defend them.

Now to speak specifically about CETA matters; we need to know much more about the performance of training programs in specific labor markets and under specific labor market conditions. Aggregate data from programs scattered all across

the nation over time does not tell the individual labor market planner much of what he needs to know. Labor markets are very different one from another. We need to know about each labor market especially where institutions in those labor markets are breaking down as they have so widely for urban youth in this nation.

If decentralized employment and training programs are to fulfill their promise we need a much larger effort and a more aggressive effort in the following three areas:

First, the development of accurate local labor market data; data which includes vacancies and the structure of the labor force as well as raw unemployment data.

Second, development of a much more accurate understanding of the functioning of the labor market institutions or rather their malfunctioning at the local level. The school to work transition for instance.

And, finally, we must be prepared to devise ways to spend the money needed to train those responsible for planning and operating labor market programs in the understanding of the use of this new data. To rely on short-term orientation courses on the one hand, or to wait until local labor market analysts have all gotten masters degrees in labor market policy simply is not enough. The technical assistance effort provided by the Department of Labor and the manpower institutional grantees, the universities and the ten regions are doing the best they can with what they've got. That effort requires much larger resources and more support through the Department of Labor. It is ironic that resources available to the Department of Labor have been cut back at the very time when its responsibilities to provide training and technical assistance to a new decentralized system have expanded.

APPENDIX E

AFL-CIO STATEMENT ON MANPOWER RESEARCH AND POLICY

BY

MARKLEY ROBERTS
ECONOMIST
AFL-CIO

Statement by Markley Roberts, Economist, AFL-CIO,

On Manpower Research and Policy

Most union people view manpower research with a considerable degree of skepticism. In the current economic climate, with more than 7 million people out of work, we tend to look at the clear and present dangers of persistent high unemployment as requiring immediate, urgent policy decisions on quick implementation of job-creating programs.

Rightly or wrongly, therefore, union officials are more likely to look for "quick and dirty" research aimed at serving immediate policy and program needs, rather than for long-drawn-out scholarly research projects that don't appear to have immediate practical applications.

One problem that concerns us is the increasing tolerance of manpower, employment, and unemployment researchers in academic and private institutions for higher and higher levels of unemployment. Unfortunately, many of the so-called "explanations" of persistent high unemployment -- in terms of higher proportions of teenagers and women in the labor force -- are being used to encourage and to justify tolerance of higher levels of unemployment up to 5 or 6 or 7 percent, far above the 4 percent unemployment figure that has been unofficially but effectively enshrined in the "potential GNP" measure issued by the U.S. Commerce Department.

I hasten to add that the 4 percent figure was never sanctioned by any public policy decision in Congress or anywhere else. The AFL-CIO does not accept the 4 percent target. We refuse to define "full employment" in terms of some "acceptable" level of unemployment. We

say that unemployment must be reduced to 3 percent of the civilian labor force and unemployment must be kept from increasing to more than 3 percent. We don't accept the implied second-class status assigned to women and teenagers by those who want toleration of permanently higher levels of unemployment.

Likewise, there is an unfortunate implicit acceptance of the Phillips Curve trade-off theory of unemployment and inflation in much of the discussion of unemployment and certainly in the attempts to define "full employment" in terms of some level of unemployment. Our experience in the recession of 1969-70 and in 1973-76 suggests that some new research on the Phillips Curve is needed. Even conservative Federal Reserve Board Chairman, Arthur Burns, doubts the validity of the Phillips Curve trade-off.

Furthermore, the AFL-CIO takes the position that the present official unemployment statistics fail to reflect seriousness of unemployment and underemployment. To get a more comprehensive picture of unemployment we include "discouraged workers" and half of the involuntary part-time workers in our measure -- which come to 10.3 percent or 9.7 million unemployed in March, 1976 when the official report was 7.5 percent or 7 million.

There is a lot of research that is needed -- and some that we don't need. In the latter category, research that we don't need, I put the idea advanced by Abe Raskin and others, that we test a lower minimum wage for teenagers to see if more teenagers will be hired if they are paid at lower rates. We don't need research to know that MacDonald's

hamburger joints would rather hire low paid teenagers than regular adult workers at decent living wages.

There's too much empty-box economic theorizing about the disemployment effects of higher minimum wages. Years and years of research on this subject have come up with no clear evidence of such effects -- and yet manpower and labor market economists keep talking and writing glibly about high teenage unemployment being caused by federal minimum wage increases.

I am also very skeptical about research which moves out of objective areas into subjective areas. I am thinking specifically of research aimed at discovering the "intensity of job search" by unemployed people. I don't say it's impossible, but I think it is very difficult to get a true picture of what goes on inside the mind of job-seekers. This, of course, is true also for the so-called "discouraged workers."

So what kind of research do we need? We need more research into relations of aggregate demand and employment. We need to re-examine Okun's Law and we need some more explorations of input-output research on spending and employment to extend the good work done by Ron Kutscher at BLS. We need to explore more fully the job-creating effects of public vs. private spending.

Manpower research with the biggest current interest probably revolves around CETA and public service employment, but I think the Humphrey-Hawkins "Full Employment Bill" is progressing in Congress with regrettable lack of solid research background on the labor market issues raised by this legislation.

I'd like to see labor economists exploring more carefully the family budget-family income output from the Bureau of Labor Statistics. We get a lot of analysis of labor market behavior by non-government researchers, but we don't get enough examination and analysis of issues and data that are highly significant in terms of income distribution within our society. By this I mean the BLS lower, intermediate and higher standard family budgets, Census data on family income, workers' real income and real buying power, and productivity, employment and income impacts of U.S. exports and imports.

In this connection, I was shocked by John Kendrick's recent monograph on so-called "capital shortages" and productivity for the Joint Economic Committee in which he totally ignores the income distribution effects, the employment effects, and the domestic U.S.A. productivity effects of U.S. business investment abroad rather than in the U.S.A.

Finally, let me say that I am disappointed by the too frequent tendancy of labor economists and manpower researchers on employment and training to ignore or sidestep fundamental issues of income distribution, social justice, and social cohesion which are essential components of any kind of discussion of economic growth, labor market behavior, employment, unemployment, training, and manpower policy generally. These issues necessarily involve moral and social judgments, but a reluctance to make such judgments condemns researchers to the role of numbers-jugglers.

☆ U. S. GOVERNMENT PRINTING OFFICE : 1976 O - 210-882 (131)

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- *Proceedings of a Conference on Employment Problems of Low Income Groups*, Special Report No. 5, February 1976.
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- *Current Issues in the Relationship Between Manpower Research and Policy*, Special Report No. 7, March 1976.

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